

1 SUPERIOR COURT OF THE STATE OF CALIFORNIA
2 COUNTY OF SAN FRANCISCO
3 ---oo---
4 LESLIE WHITELEY AND LEONARD WHITELEY,
5 Plaintiffs,
6 vs. No. 303184
7 RAYBESTOS-MANHATTAN, et al.,
8 Defendants.
9

10 _____ /
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12
13 VOLUME II; PAGES 105 - 228
14 DEPOSITION OF
15 JERRY F. WHIDBY

16 _____
17 Saturday, February 12, 2000
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20
21

22 REPORTED BY: MARK W. BANTA, CSR #6034
23 TOOKE & ANTZ
24 COURT REPORTING & VIDEO SERVICES 818 Mission Street, Fifth
Floor
25 San Francisco, California 94103

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3 MS. CHABER: 108

4 ---oo---

5 EXHIBITS

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7 (Exhibits 1 and 2 marked in previous volume)
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11 INSTRUCTIONS TO WITNESS BY COUNSEL

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1 BE IT REMEMBERED on Saturday, February 12, 2000,
2 commencing at 1:08 p.m. thereof, at the Offices of Shook,
3 Hardy & Bacon, One Market Plaza, Steuart Tower, Ninth
Floor,
4 San Francisco, California, before me, MARK W. BANTA,
5 Certified Shorthand Reporter No. 6034 for the State of

6 California, personally appeared
7 JERRY F. WHIDBY
8 called as a witness, who having been previously sworn, was
9 examined and interrogated as hereinafter set forth.

10 ---oo---

11 A P P E A R A N C E S

12 WARTNICK, CHABER, HAROWITZ, SMITH & TIGERMAN, 101
13 California Street, Suite 2200, San Francisco, California
14 94111, represented by MADELYN J. CHABER, Attorney at Law,
15 appeared as counsel on behalf of the Plaintiffs.

16 SHOOK, HARDY & BACON, LLP, One Market Street,
17 Steuart Tower, Ninth Floor, represented by LUCY MASON,
18 Attorney at Law, appeared as counsel on behalf of the
19 Defendant Philip Morris.

20 WOMBLE, CARLYLE, SANDRIDGE & RICE, 200 West Second
21 Street, P.O. Drawer 84, Winston-Salem, North Carolina
27102,
22 represented by CHRISTOPHER A. KREINER, Attorney at Law,
23 appeared as counsel on behalf of the Defendant R.J.
Reynolds

24 Tobacco Company.

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1 EXAMINATION BY MS. CHABER

2 MS. CHABER: Q. Good afternoon, Dr. Whidby.

3 A. Good afternoon.

4 Q. This is a continuation of your deposition that we
5 began in November of last year.

6 First of all, I notice that you have made
7 corrections to your deposition?

8 A. Yes, ma'am.

9 Q. And those were made in December of 1999?

10 A. If that's what it says, yes.

11 Q. Okay. Let me just show you what I have as
12 corrections to your prior --

13 A. December 13th, yes.

14 Q. Okay. And did you sign this?

15 A. Yes, ma'am, that's my signature.

16 Q. And that's your handwriting making the
17 corrections?

18 A. Yes, ma'am.

19 Q. And I take it, then, you fully reviewed your prior
20 testimony?

21 A. Yes, ma'am. I read the whole thing.

22 Q. And these were the only changes or corrections
23 that you had of that?

24 A. Yes.

25 Q. Did any of these changes change anything

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1 substantively?

2 A. May I look, please?

3 Q. Absolutely.

4 A. For example, on the first one it says "flavor of
5 chemistry."

6 Q. Um-hmm.

7 A. I would never have said that, I think.

8 Q. You would have said "flavored chemistry"?

9 A. Yes, ma'am.

10 Q. Without the "of" in between?

11 A. That's right. So I think the type of -- let me
12 look to make sure. Yeah, on the next one, it says "He's a

13 professor there." He was a professor there.
14 And the third one, it says "certain launches of
15 cigarette design originally." And I believe that should
16 have been "certain areas of cigarette design."
17 Q. Okay. And you -- could you identify that page?
18 A. I'm sorry. It's page 38, line 7.
19 Q. Okay. Fine.
20 A. The next one is on page 48, line 11. It
21 originally says: "Cigarettes that these other parameters
22 from the." That didn't make much sense as written.
23 I believe it should have been "cigarettes that are
24 smoked at these other parameters."
25 The next one is page 49, line 22. It said:

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1 "Currently the Commonwealth of Massachusetts prescribes
that
2 we measure everything that has sales in the Commonwealth
3 greater than five percent." I may indeed have said five
4 percent. More accurately, however, it is three percent at
5 this time. I may have misspoke.

6 Q. So that one potentially was a substantive change
7 as opposed to a grammatical --

8 A. Could have been, yes. If I said five, I
9 misspoke. It should have been three.

10 Q. Okay.

11 A. Because the first year we were involved with
12 Massachusetts, it was five percent. Subsequent years it's
13 been three percent.

14 Q. Okay.

15 A. Next was on page 66, line number 8. Dr. Seeman's
16 name was misspelled here. It should be S-E-E man, rather
17 than S-E-I-M-A-N.

18 On page 89, line 6, it said "it's a couple system"
19 and it should have said "it's a coupled system."

20 Q. And those are all the changes?

21 A. Those are all the ones I detected when I made
22 those corrections, yes.

23 Q. Okay. With the exception of the one that we
24 discussed that potentially was a substantive change, they
25 were all in essence grammatical or spelling changes?

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1 A. Yes, but I'm afraid it would get the incorrect
2 meaning if we left the way it was.

3 Q. Okay. Since your last deposition you've provided
4 a list of your publications which you did not have with
you

5 at the last deposition. Correct?

6 A. That is correct.

7 Q. And counsel has handed me a page. Can you take a
8 look at this and see if these indeed are your
publications?

9 A. These are the publications that I had on this list
10 when I put the list together.

11 Q. Okay. Are there other publications that do not
12 appear on that list?

13 A. Yes, ma'am, there are. I do not have a list,
14 however, of the other publications.

15 Q. Are they ones subsequent to the last date of
16 publication on the list I've handed you?

17 A. Yes, ma'am.

18 Q. And where or how would one determine what those

19 publications were?
20 A. The only way that I know of to determine them
21 would be to go to the literature, search the literature to
22 find out where my name appeared on published articles.
23 Q. You do not in any way, shape or form have either a
24 copy of those articles or the names of the articles that
you
25 have published?

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1 A. I couldn't find either the articles or a list. To
2 my knowledge, I don't have a list. I don't remember
making

3 a list of those.

4 Q. Do you know what publications, what journals or
5 other reports these -- your publications would appear in?

6 A. Other than the ones that are on the list here?

7 Q. Other than the ones that are on the list.

8 A. I believe I have some -- well, it's there.

9 I believe there's some in Bitraga. Bitraga. I
10 don't know how to spell it. It's a German publication
that

11 deals with tobacco science.

12 Another one would be Tobacco Science. I believe I
13 had publications in that.

14 I believe I have publications in the Journal of
15 Fire Science.

16 I have numerous presentations and publications at
17 Tobacco Chemists Research Conference currently known as
the

18 Tobacco Chemists Science Conference. Excuse me, Tobacco
19 Science Conference, not the Tobacco Chemists Science
20 Conference. There may be others.

21 Q. What was the other name that you said for it?

22 A. It used to be called the Tobacco Chemists
23 Conference. It's currently called the Tobacco Scientists
24 Conference. Tobacco Scientists Research Conference. I'll
25 get it right in a second.

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1 It used to be called the Tobacco Chemists Research
2 Conference. Now it's called the Tobacco Scientists
Research

3 Conference. It was changed a couple of years ago to be
more

4 inclusive.

5 There may be other areas that I have publications
6 in, but I don't recall them.

7 Q. And do you know what the topic -- first of all, do
8 you have more than one article published in --

9 A. Bitraga?

10 Q. Bitraga?

11 A. Perhaps. Probably do.

12 Q. Do you know what the subject matter is of any of
13 the publications you have there?

14 A. I believe the one -- one of the ones that's in
15 Bitraga deals with filtration mechanisms. Other areas I
16 don't recall.

17 Q. What about in Tobacco Science? Do you have more
18 than one publication there that's not -- we're talking
about

19 any publications that are not already listed.

20 A. See, these publications, I put this list together

21 when I was interviewing for a job at Philip Morris. This
is
22 before I did any tobacco research at all.

23 Q. Right.

24 A. And I -- since I've worked at Philip Morris, I
25 didn't go applying for jobs or needing a list of, you
know,

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1 publications, so I didn't really put one together again.

2 Q. Okay.

3 A. So all my external publications that I developed
4 while I was at Philip Morris and even ones that I may have
5 had partial work done before I went to Philip Morris are
not

6 included in this list.

7 MS. CHABER: Okay. And by this list, we're
8 referring to what we're going to mark as Plaintiff's
Exhibit

9 3.

10 (Exhibit 3 marked.)

11 MS. CHABER: Q. Let me just make sure I
12 understand correctly. Exhibit 3 is a list of publications
13 that you put together for the purposes of, in essence,
14 applying for jobs?

15 A. Yes, ma'am. That's correct.

16 Q. Okay. And so --

17 A. Not just at Philip Morris, but when I was applying
18 for jobs, right.

19 Q. And if I understand correctly, these would all be
20 from 1970 -- 1971 and before?

21 A. Yes. Yes.

22 Q. Okay.

23 A. Because I started work at Philip Morris at '72,
24 and so that's right. '71 and before. I don't see a '72.

25 No.

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1 Q. And if I understand correctly --

2 A. I'm sorry. If we look below this arrow here
3 (indicating), there's something there that say accepted
for

4 publication.

5 Q. Okay.

6 A. And another one says accepted, and another one
7 says submitted for publication. And those three there,
they

8 may have indeed appeared in literature post 1971.

9 Q. All right. But in any case, they were written and
10 submitted prior to any time that you went to work for
Philip

11 Morris?

12 A. Yes, ma'am.

13 Q. Is it fair to say that none of these publications
14 listed on Exhibit No. 3 relate to cigarettes, cigarette
15 design, cigarette research?

16 A. I didn't work on any --

17 Q. Or smoking and health?

18 A. I didn't work on any of that prior to going to
19 Philip Morris.

20 Q. Okay. And then if I understood you correctly
21 further, you did --

22 A. Although the techniques that were learned by
23 myself when I was in graduate school doing this work was
24 part of my repertoire that I took with me as a
professional
25 going into work.

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1 Q. Sure. Which you then applied to a different
2 field?

3 A. That's correct.

4 Q. And I didn't mean to suggest anything otherwise.

5 I just --

6 A. I understand.

7 Q. -- wanted to understand about those publications.

8 Subsequent to the time you went to work for Philip
9 Morris, you have published other articles in the outside
10 literature. And by outside literature, I mean outside of
11 Philip Morris?

12 A. Correct.

13 Q. And you've enumerated some of them, and we'll talk
14 more specifically about others. But I just want to
15 understand the general topic.

16 Those publications that occurred after you went to
17 work for Philip Morris you did not keep lists of because
you

18 were doing them in the course and scope of your employment
19 at Philip Morris?

20 A. Um-hmm. (Witness nods head.)

21 Q. Is that a yes?

22 A. Yes, ma'am. I'm sorry.

23 Q. And do you know whether or not Philip Morris
24 retains lists of the publications of its scientists which
25 are published outside the company?

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1 A. I don't know that they do. I don't know. I
2 don't -- I don't know that they do, no.

3 Q. During the time that you were there, would there
4 be any kind of monthly, yearly, by decade or whatever
5 newsletter or other form of document that would go around
6 the company that would say, "And isn't this wonderful,
7 Dr. Whidby published X in this literature out there"? Was
8 there something like that?

9 A. There's some of that, yes. We occasionally
10 celebrated publications, if you will.

11 Q. And was the information then sort of spread to
12 others within the company as to what the publication was?

13 A. Yes.

14 Q. And the title?

15 A. Yes.

16 Q. Did this take any kind of written form?

17 A. It probably was in, as you suggested earlier,
18 newsletter type forms.

19 Q. And did the company have a newsletter the entire
20 time you were there?

21 A. No, not a continuing one that I can recall. It
22 was one form or another.

23 Q. Did the newsletter have any names that you recall?

24 A. I recall something called The Globe. I'm not sure
25 that had publications in it, though.

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1 Q. I'm not limiting that question to those that might

2 only have publications.
3 A. I understand. Okay. There was others, but I
4 can't recall the names of them off the top of my head.

5 Q. When was the last time you recall seeing the
6 publication The Globe?

7 A. It's probably several years ago. A few years ago
8 now. I don't think they publish The Globe any more.

9 Q. Do you know what time period during your employ
10 they published The Globe?

11 A. I believe it was in the '90s.

12 Q. Let's go back to what -- Tobacco Science, do you
13 believe you had more than one publication in Tobacco
14 Science?

15 A. I may have. I don't recall whether I did or
16 didn't.

17 Q. You know you had at least one?

18 A. I strongly believe I had at least one.

19 Q. Okay. And you may have had more than one?

20 A. I may have had more than one.

21 Q. Okay. Can you recall what the topics of any
22 publications may have had in Tobacco Science?

23 A. Tobacco Science articles probably were dealing
24 with filtration. I'm not real sure about that.

25 Q. And although I probably could guess from the

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1 title, Fire Science, what area of publication did you
2 publish in Fire Science?

3 A. The area we were working in was the development of
4 methods to evaluate the ignition propensity of cigarettes.

5 Q. And do you know how many publications you had in
6 Fire Science?

7 A. No, I don't.

8 Q. And there was at least in the news some discussion
9 recently of Philip Morris releasing a cigarette with less
10 propensity to start fires. Were you involved in the
11 creation of that cigarette?

12 A. Yes, I was.

13 Q. And does that cigarette have a name that you're
14 aware of?

15 A. I believe it's going to go in the test market
16 under the Merit brand family. But it is going into test
17 market, as you probably recall from the publications.

18 Q. And how long did you work on that project?

19 A. I started working on reduced ignition propensity
20 cigarette, that concept, that type of product, I believe

it

21 was somewhere around 1987. And I'm still consulting in
that

22 area. So that would make it 13, 14 years.

23 Q. And when you say you're still consulting, are you
24 still consulting on behalf of Philip Morris?

25 A. Yes.

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1 Q. Do you consult for any other tobacco companies?

2 A. No, I don't.

3 Q. I believe that you told me that you began
4 consulting -- well, you retired from Philip Morris and
5 became a consultant sometime in 1998.

6 A. Yes, ma'am.

7 Q. Do you recall the month?

8 A. I think I retired in June '98. I believe that's

9 right. And I became a consultant right after that.

10 Q. Okay.

11 A. So I guess I've consulted for approximately a half
12 a year in '98.

13 Q. And then did you consult for all of the year of
14 1999 with Philip Morris?

15 A. I was consulting for Philip Morris in '99, yes.

16 Q. And I asked you at the last deposition how much
17 you had billed Philip Morris for consultancy purposes in
18 1998.

19 A. Um-hmm.

20 Q. And do you have -- you didn't know the answer at
21 that time. Do you know the answer at this time?

22 A. Yes, ma'am, I do.

23 Q. Okay. And can you tell me what that is?

24 A. Okay. The amount of money that was -- that I
25 billed to Philip Morris was approximately \$50,000 for
1998.

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1 That included expenses. After expenses, that number was
2 approximately \$34,000.

3 Q. Okay. And what about for 1999?

4 A. I only have one number for 1999 because I haven't
5 done my taxes yet to break apart the expenses. And I just
6 got a recent statement from Philip Morris, and it's
\$100,000

7 plus a little bit, but right at about \$100,000.

8 Q. And did you retain the ability to purchase stock
9 at employee rates?

10 MS. MASON: In his retirement, you mean?

11 MS. CHABER: Yes.

12 THE WITNESS: I don't have any -- I don't believe
13 I have -- that I know about, I don't have any rights other
14 than a normal person to publish -- to purchase stock from
15 Philip Morris.

16 MS. CHABER: Q. Over the years that you were
17 working for Philip Morris, were you given stock as part of
18 any compensation package?

19 A. Yes, ma'am, I was.

20 Q. And were there different time periods that the
21 stock would vest, such that you could sell them if you
22 chose?

23 A. Yes, ma'am.

24 Q. And by the time you retired from Philip Morris,
25 had all of the stock that you had been given vested?

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1 A. I believe it had, yes.

2 Q. And in addition to being given stock as part of
3 your compensation package, did you also have the ability
4 while you were there to purchase other stock yourself at
5 what would reflect some sort of employee discount?

6 A. No, ma'am, I don't believe that was -- that was
7 not an option that I used. I don't think I had it
available

8 to me. And the stock that I had was -- was stock options.

9 Q. Okay. Did you exercise all your stock options?

10 A. No, ma'am, I did not.

11 Q. Can you tell me how much you did exercise in terms
12 of stock options?

13 A. I exercised most all of it.

14 Q. And can you tell me what that reflects in terms of

15 shares of stock?
16 A. That I exercised over the years that I was there?
17 Q. Yes.
18 A. Total years? No, ma'am, I can't. I don't know
19 the answer to that.
20 Q. Did you retain that stock to this present time?
21 A. The remainder of the stock that I had not
22 exercised I have retained until this time. Is that the
23 question?
24 Q. Okay. In other words, you still can exercise your
25 options to purchase? Is that correct?
122
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1 A. Yes, ma'am, I have some options left that I can
2 exercise to purchase.
3 Q. Okay. And you --
4 A. If I wanted to do that.
5 Q. And you own stock outright?
6 A. I own a little bit of stock outright.
7 Q. And can you tell me how much stock you own in
8 Philip Morris?
9 A. Outright?
10 Q. Outright.
11 A. This is a crude estimate. I think I own something
12 like six or seven hundred shares of Philip Morris
outright.
13 I'm not sure if that's the exact number, but it's not many
14 more than that.
15 Q. Okay. That's the range?
16 A. Well --
17 Q. It could be a little bit more?
18 A. It could be a little bit more. It could be a
19 little bit less.
20 Q. Okay.
21 A. It's part of a portfolio that I own.
22 Q. All right. And in terms of options, how many
23 shares could you purchase?
24 A. I don't know the exact number there, either. The
25 current value of those options, however, is not positive.
123
124
1 There's no monetary value to the options that I own.
2 The number of shares that I could exercise are a
3 few thousand. I don't know how many that is.
4 Q. And since you have retired, you have not exercised
5 any of those options?
6 A. No, ma'am, I have not. I could have, but I
7 haven't.
8 Q. And is there an expiration time period?
9 A. Yes, ma'am.
10 Q. And what is that?
11 A. 10 years after the grant date of those options.
12 Q. And what was the grant date?
13 A. I believe I have two or three years left, and the
14 last year that I received stock options was in 1997, as I
15 recall. I don't think I got any in '98, since I retired
in
16 June.
17 So I may have three years, say '97, '96 and '95.
18 And that's a guess. But it's probably a pretty good
guess.
19 Q. Okay. And I'm very unsophisticated when it comes

20 to this, but there's different types of stock. You know,
21 there's common stock and voting shares and C and B and who
22 knows what else.

23 A. I don't know much more than you do, if anything.

24 Q. Do you know, of the shares that you do own, are
25 they just common stock?

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1 A. Yes, ma'am. I think so.

2 Q. Okay. And --

3 A. I know if I exercise them, if I'm making money off
4 of them it's treated as ordinary income unless I hold them
5 for a long period of time and get capital gains on them.

6 Q. And for the stock for which you have an option to
7 exercise --

8 A. I'm sorry. I was talking about the options.

9 Q. Sorry. Okay. The options are common stock. What
10 about the other stock?

11 A. The other stocks? They're common, also.

12 Q. They're common, also?

13 A. As common as dirt. Yeah.

14 Q. Okay. And I take it that if the stock is worth
15 less because the price is falling, the gain to you is
16 obviously less?

17 A. That's correct.

18 Q. Has Philip Morris bought back any of your shares
19 of stock?

20 A. No. I -- no, they never have. I don't know how
21 they would do that.

22 When I sell stock, does Philip Morris buy it
23 back? I don't know. I think it goes into the stock
market

24 and somebody else buys it, right?

25 Q. Well, let me ask you, have you -- you have sold

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1 shares of Philip Morris stock? Correct?

2 A. Over the years, yes.

3 Q. Have you sold any since you retired?

4 A. No, I have not.

5 Q. Have you sold any in 1997?

6 A. I may have.

7 Q. And were those sold --

8 A. Through a broker.

9 Q. Through a broker or in the normal way anybody
10 else --

11 A. Yes, ma'am.

12 Q. -- would sell stock? Okay. And you're not aware
13 of any occasion where Philip Morris did any buy-backs of
14 your stock?

15 A. (Witness shakes head.) No, ma'am, I'm not. I
16 should look into that.

17 Q. Okay. What work have you done since -- besides
18 obviously reading and filing the corrections that you did
to

19 your prior deposition, what work have you done with
respect

20 to this case and your opinions in this case since your
prior

21 deposition?

22 A. I met with counsel this morning, and perhaps on
23 one other occasion but not -- not here.

24 Q. Where did you meet?

25 A. In Richmond.

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1 Q. And what was the nature of the meeting in
2 Richmond?

3 A. We met and we discussed -- I think the only thing
4 we discussed was my correction of the deposition, I think.

5 Q. And who did you meet with in Richmond that time to
6 correct your deposition?

7 A. I believe it was Mr. Harkness, I think.

8 Q. Harkness?

9 A. Yes. H-A-R-K-N-E-S. I don't know if it's one S
10 or two S's. Harkness.

11 Q. And is this someone from the Shook, Hardy firm?

12 A. I don't think so.

13 Q. Do you know, was he a lawyer?

14 A. Yes, ma'am.

15 Q. And do you know what firm he was from?

16 A. I believe he's with the Deckard Price (phonetic)
17 firm.

18 MS. MASON: I'm not sure.

19 MS. CHABER: Deckard --

20 THE WITNESS: Price.

21 MS. CHABER: Q. And is that a firm that

22 represents Philip Morris?

23 A. Yes, ma'am, I think so.

24 Q. And have you worked with them on prior occasions?

25 A. Yes, ma'am.

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1 Q. And you met with counsel this morning. Whom did
2 you meet with?

3 A. Ms. Mason.

4 Q. Anyone else present?

5 A. Yes, ma'am.

6 Q. Who else?

7 A. Jenny Brown for part of the time.

8 Q. Anyone else?

9 A. Yes, ma'am.

10 Q. Who else?

11 A. Mr. Hardy part of the time.

12 Q. Anyone else?

13 A. I don't recall anybody else. Somebody came in and
14 got a sandwich.

15 Q. Was there anyone there representing R.J. Reynolds?

16 A. Not to my knowledge. No. Unless some of the
17 people I just mentioned were.

18 Q. Do you know if there was a gentleman by the name
19 of Jeff Fir there?

20 A. I don't think so. I don't believe I've ever met
21 the gentleman.

22 Q. Mr. Esher?

23 A. No, ma'am.

24 Q. Mr. Kreiner?

25 A. No, ma'am.

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1 Q. Have you read or reviewed any documents between
2 the deposition and now in preparation for your testimony

or

3 this deposition?

4 A. Yes, ma'am.

5 Q. What have you looked at?

6 A. This (indicating).
7 Q. By this, you're pointing to Exhibit 3, the
8 publication list?
9 A. Yes, ma'am.
10 Q. What else?
11 A. And your refiling of the Notice of Deposition.
12 Q. Okay. We'll get to that in a minute.
13 Have you read any testimony given in this case to
14 date?
15 A. No, ma'am, I have not.
16 Q. Were you given any information about any testimony
17 that was given in this case?
18 A. No, I was not.
19 Q. Did you have any discussions with anyone with
20 respect to Dr. William Farone?
21 A. Would you say the question again, please?
22 Q. Maybe can you read it back.
23 (Question read as follows:
24 Q. Did you have any discussions with anyone
25 with respect to Dr. William Farone?)

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1 A. Dr. Farone was discussed this morning.
2 Q. Tell me what that discussion was.
3 A. I don't recall all the details. It was -- one
4 was --
5 MS. MASON: Let's go off the record for just a
6 second.
7 (Discussion off the record - 1:42 to 1:44 pm.)
8 MS. MASON: For the record, we are claiming
9 attorney-client privilege for any conversations I or any
10 other lawyer representing Philip Morris may have had with
11 Dr. Whidby about his employment or his preparation for
12 helping the company defend itself against litigation.
13 You should feel free, however, to ask him whatever
14 questions you want to ask him about Dr. Farone, but not my
15 conversations with Dr. Whidby about anything.
16 MS. CHABER: Well, I would note that Dr. Whidby no
17 longer works for Philip Morris and that the conversations
18 that you are claiming are conversations that are made
prior
19 to his deposition today and involving the Whiteley case,
and
20 you have also disclosed him as an expert on these very
same
21 topics and subjects, and so I do not believe that you have
a
22 right to claim a privilege during this time period when
your
23 consultant is no longer your consultant but rather is an
24 expert witness being offered for deposition in this case.

25 Q. Were you shown any portions of Dr. Farone's

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1 testimony?
2 A. No, ma'am, I was not.
3 Q. Was anyone reading from Dr. Farone's testimony
4 when they were asking you questions?
5 A. No, ma'am, certainly not to my knowledge, they
6 were not reading from it. As a matter of fact, they told
me
7 that they couldn't do that. They told me that some rule
had

8 been invoked and they were forbidden to tell me anything
9 about any of the people's testimony.

10 Q. Did they mention what rule that was?

11 A. No, not that I could recall. It was just that
12 they couldn't do it.

13 Q. But you did have discussions with them about
14 Dr. Farone prior to this deposition?

15 A. We did discuss Dr. -- Dr. Farone's name was
16 mentioned, yes.

17 Q. Okay. And did you discuss what Dr. Farone's role
18 was at Philip Morris when he was there and you were there?

19 ^ MS. MASON: You know, I'm not going to let you
20 answer that one.

21 We already told you the topic of the
22 conversation. Any more substance I think invades the
23 privilege.

24 MS. CHABER: He hasn't told me the topic. It was
25 a discussion re Dr. Farone.

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1 ^ MS. MASON: Right. The topic I think you're
2 entitled to, but not anything more than that.

3 So don't answer that question.

4 MS. CHABER: You're going to have to mark all of
5 these, I guess, to have the deposition marked as to all of
6 these matters.

7 Q. What did Dr. Farone do at Philip Morris when you
8 were there?

9 A. I recall Dr. Farone first coming to Philip Morris
10 when I was there. He -- we overlapped. I was there
before

11 him and I was there after him. So when he first came to
12 Philip Morris, I recall him coming as a scientist. I
13 believe it was associate principal scientist. I don't
14 remember exactly what his title was, though I think that's
15 correct.

16 Later on he was promoted to director of research,
17 of applied research. At some point after he became
director

18 of applied research, I was in effect working for him
because

19 I was working in computer applications division for him
20 then. So he was first a scientist, then the director of
21 applied research, and I think that's the title he had when
22 he left.

23 Q. And you indeed did go to work for him at some
24 point in time?

25 A. Yes.

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1 Q. And at the time, did you have respect for
2 Dr. Farone?

3 A. Yes.

4 Q. And do you still have respect for Dr. Farone?

5 A. I haven't really had much dealings with Dr. Farone
6 since he left, but as a scientist, I don't have any reason
7 to believe I wouldn't respect his scientific work and
8 Dr. Farone.

9 Q. Have you prior to today read any testimony that
10 Dr. Farone has given in any deposition or trial?

11 A. Yes, I have.

12 Q. And do you know what you've read?

13 A. I don't recall which trial or which deposition it

14 was that I -- that I read.
15 Q. When was that?
16 A. Over a period of time since Dr. Farone has been
17 testifying and giving depositions.
18 Q. How many prior testimonies have you read?
19 A. I don't recall exactly how many. A couple,
20 probably. Two or three. I don't know exactly.
21 Q. Do you know of any obvious misstatements that
22 Dr. Farone has made in any of the testimony that you have
23 read?
24 A. Specifically, I don't recall any mis -- any -- any
25 things that -- I think Dr. Farone in most cases
misremembers

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1 some of the things, perhaps. We don't necessarily agree.
2 Q. What are the areas that you think he misremembers?
3 A. I don't know specifically. You'd have to give me
4 an example, show me an example. I think some of the
5 impressions he had about various things is not the same
6 impression I have.
7 Q. What are the various things?
8 A. I don't recall anything specifically.
9 Q. Do you recall anything in terms of topics?
10 A. What I remember in reading those depositions and
11 testimonies was Dr. Farone recalling outcomes that were
not
12 the way I recall the outcome.

13 For example, perhaps with some of the work and the
14 conclusions drawn from that work, I think some of the
15 conclusions he drew were premature because he left, and if
16 he had been around for the full time of some of those
17 things, they wouldn't have been the same conclusions that
he

18 reported on.

19 Q. Such as?

20 A. Some of the filtration work, perhaps. Some of the
21 denitrification work.

22 Q. Anything else?

23 A. I'm sure there's other areas, but I can't recall
24 them.

25 Q. When did you go to INBIFO?

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1 MS. MASON: You mean for the very first time?
2 MS. CHABER: Q. For the very first time?
3 A. I can't recall when that was. It was probably
4 sometime in the '90s. It may have been before then, but I
5 don't recall exactly.
6 Q. What was the purpose of your going to INBIFO?
7 A. A general visit to the laboratory to see the
8 people, see -- to visit with them. Basically, to see the
9 project they were working on.
10 Q. What was the project they were working on?
11 A. Projects they were working on? They're a biologic
12 testing laboratory, so they're working on a large number
of
13 projects, and to see a good laboratory practice --
14 laboratory in action.
15 Q. What were they working on that you were observing?
16 A. Their testing procedures. Their analytical --
17 their testing procedures.
18 Q. And what were those?

19 A. I don't recall specifically the details of the
20 tests they were doing. Some of the analytical techniques
21 they were using, some of the testing of -- some of the
22 equipment they had. It was basically a show-and-tell type
23 thing; scientists going to look at sister laboratories.

24 Q. And what was the purpose of your going?

25 A. To go visit and see -- see the work that they were

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1 doing, and see -- I'm sorry. I don't understand what
you're

2 talking about.

3 Q. Well, you were just going to test out how they did
4 things as opposed to what they were working on?

5 A. I went, I heard them report on the work that they
6 were doing. The work -- the types of projects they were
7 working on, the types of analytical techniques they were
8 using, the people who were -- who were there.

9 At one time and maybe still so, the evaluation
10 process for determining promotion, salary increases and
11 whatever was combined for our laboratories in Europe and
in

12 the U.S., so we needed to know the scientists there.

People

13 making evaluations of the scientists needed to know the
14 quality of the science being done by the people around all
15 of our laboratories. So we need -- people who were making
16 those evaluations needed to know the scientists in the
17 various laboratories. So not only did I visit INBIFO, I
18 visited Neuchatel, basically the people in our laboratory
in

19 Richmond. So when you're saying this scientist is
20 equivalent to that scientist, you need to have some
21 firsthand information about that.

22 Q. At the time you went, first went to INBIFO, what
23 was your specific job title?

24 A. It probably was -- I'm not sure this is the case,
25 but it probably was director of basic research. It may
have

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1 been technology fellow. I may have gone earlier than
that,

2 too, but I don't -- I just don't recall.

3 Q. How many times did you go to INBIFO?

4 A. Over the years, three or four, probably.

5 Q. Do you believe you went at any time prior to 1990?

6 A. I could have. I don't remember. I could have.

7 Q. The first time you went to INBIFO, what type of
8 project were you observing? Or projects?

9 A. As I stated before, their general -- their general
10 laboratory, the types of work that they do, the analytical
11 techniques they use, the equipment they have. And talking
12 to the scientists, hearing them report on their work.

13 Q. You said that they were doing particular projects
14 which you were taking a look at.

15 A. Right.

16 Q. What were the projects that they were doing that
17 you were taking a look at?

18 A. For example, gas chromatography is being used.

19 Q. For what?

20 A. For what? For whatever -- whatever task they're
21 asked to do.

22 Q. And I'm asking you what tasks were they doing for
23 which they were using gas chromatography?

24 A. I don't recall specifically what they were using
25 it for at the time. I was more interested in the
technique,

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1 the technology.

2 Q. What other techniques besides gas chromatography?

3 A. I don't recall all the techniques I saw. They
4 were using -- one of the things we were really interested
in

5 was the good laboratory practices that they had put in
place

6 in their laboratory and how they practiced that. And they
7 were using a number of analytical techniques.

8 Q. What else?

9 A. Mass spectrometry.

10 Q. Okay.

11 A. I believe.

12 Q. What else?

13 A. I think they were doing salmonella assays. I
14 can't recall any more, but I'm sure there were more.

15 Q. Do you know what they were doing salmonella assays
16 on?

17 A. Not specifically, no.

18 Q. Or for what purpose?

19 A. Salmonella assays were generally done as I
20 understand it to determine toxicity in materials.

21 Q. And what materials were they --

22 A. I don't recall.

23 Q. -- determining toxicity?

24 A. I don't recall.

25 Q. What was the mass spectrometry --

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1 MS. MASON: Let her finish her question before you
2 start talking.

3 THE WITNESS: Sorry. Sure.

4 MS. CHABER: Q. What was the mass spectrometry?

5 What is it?

6 A. Mass spectrometry? It's a general -- it's an
7 analytical technique that allows the analyst to separate
8 according to mass the fragments of a compound so you can
try

9 to identify particular compounds.

10 Q. And what compounds were they attempting to
11 identify with mass spectrometry when you were there at
12 INBIFO?

13 A. I don't recall.

14 Q. And what about the gas chromatography? What's
15 that?

16 A. Gas chromatography is a technique used by
17 chemists, analytical chemists in particular, to separate
18 mixtures of compounds into their individual constituents.

19 Q. And what individual constituents were attempting
20 to be separated out?

21 A. I don't recall that, either.

22 Q. Can you recall that for any of the three or four
23 times that you went to INBIFO?

24 A. No, I don't.

25 Q. Is salmonella assays one of the Ames tests?

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1 A. I believe it is, yes.
2 Q. While you were at INBIFO, did you observe any
3 whole product testing taking place?
4 A. I don't know what you mean by whole product.
5 Q. Did you observe any testing of products as they
6 are commercially sold, the whole product? Like the whole
7 cigarette as opposed to a component part?
8 A. I saw smoking machines in operation where the
9 entire cigarette was used to smoke that cigarette in that
10 machine.
11 Q. And who was it that was -- were there animals
12 involved in this?
13 A. Not -- well, smoke was collected from that
14 machine.
15 Q. And what was done with the smoke?
16 A. And then it was analyzed.
17 Q. For?
18 A. For various things, I guess.
19 Q. Do you know what it was being analyzed for?
20 A. Specifically? No.
21 Q. Generally?
22 A. When I saw it, no, I don't.
23 Q. Do you know what cigarettes were being smoked in
24 the smoking machine?
25 A. No, I do not.

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1 Q. Before you went to INBIFO --
2 A. Wait.
3 Q. Sorry.
4 A. Sorry. The cigarettes they had generally I guess
5 were test cigarettes of some sort.
6 Q. Do you know one way or the other?
7 A. No.
8 Q. That's an assumption you are making?
9 A. I'm assuming it was a -- yes.
10 Q. You don't know, for example, whether it was a
11 Kentucky reference cigarette or a Marlboro or a Merit?
12 A. Oh, I'm sorry. The cigarettes I saw being tested
13 were all Kentucky reference type cigarettes. I don't know
14 which one it was.
15 Q. And are you aware of any product testing taking
16 place at INBIFO with respect to cigarettes as commercially
17 sold?
18 A. Not to my knowledge, no.
19 Q. Before your first trip to INBIFO, were you privy
20 to any research conducted at INBIFO?
21 A. What do you mean by privy?
22 Q. Did you get to see it?
23 A. The data from it?
24 Q. Yes.
25 A. Yes.

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1 Q. What? Tell me what types of research from INBIFO
2 you would see the data.
3 MS. MASON: At any time?
4 MS. CHABER: Q. At any time.
5 A. Over the years, it was like coming from any other
6 analytical laboratories. In the normal course of events
you
7 would see data that came from INBIFO talking about

8 particular assays that they may have been running.
9 Q. Are you aware of any whole product testing done at
10 INBIFO?
11 A. I think we're on -- I'm unclear, at least, on what
12 you mean by whole product testing.
13 Q. You've never heard that phrase used before?
14 A. I've never personally heard it used before, no.
15 Q. Have you ever heard --
16 A. Not before today.
17 Q. -- the phrase biological -- "testing for
18 biological activity"?
19 A. Yes, ma'am.
20 Q. And what does that mean to you?
21 A. That means testing to determine the general, if
22 you will, toxicity of materials.
23 Q. Are you aware of any testing for the determination
24 of biological activity that was done on the whole
cigarette,
25 as in the cigarette as opposed to some little component
part

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1 of the cigarette, at any time during your time at Philip
2 Morris?
3 A. Again, I'm confused by what you mean by whole
4 cigarette.
5 Q. A cigarette. You take a cigarette from a pack of
6 cigarettes that's a whole product.
7 A. A Kentucky reference cigarette is a whole
8 cigarette. Right? Is that right?
9 Q. I'm asking you cigarettes as sold. Commercially
10 available cigarettes. Are you aware of any testing for
11 biological activity of any commercially available
cigarette
12 in the entire time that you were at Philip Morris?
13 A. That was tested by Philip Morris?
14 Q. Or any other that you're aware of?
15 A. I've seen literature reports done by people like
16 the national -- or Deitrich Hoffman that tested branded
17 products and looked at those. I've seen that in the
18 literature.
19 Q. Anything else?
20 A. Not that I can recall. I'm sure there must be
21 others.
22 Q. Are you familiar with any testing done at Philip
23 Morris or for Philip Morris of the commercially-available
24 cigarette for biological activity?
25 A. Not that I'm aware of, no.

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1 Q. Did you receive or were you shown any testing
2 results from INBIFO for biological activity of a whole
3 cigarette?
4 A. Again, the whole cigarette meaning a
5 commercially-available cigarette?
6 Q. Any kind.
7 A. I've seen results on Kentucky reference style
8 cigarettes from INBIFO.
9 Q. And when was that?
10 A. I don't recall the first time I ever saw that.
11 Q. Give me a decade.
12 A. Probably the '70s, '80s.
13 Q. And what type of testing was being done?

14 A. The details of which I don't know. It was -- as
15 best I can recall, salmonella type. Ames type testing.

16 Q. And what was your job at the time you saw this
17 research data from INBIFO?

18 MS. MASON: The first time, you're talking about?

19 MS. CHABER: Well, let's go through it.

20 Q. You said the '70s and '80s. I want to know what
21 jobs you were in that you were being shown this
22 information.

23 MS. MASON: Let me just clarify for the record.

24 You asked him the first time he thought he saw it, he said
25 it was either the '70s or the '80s. I don't know if we're

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1 talking about this first time --

2 MS. CHABER: Q. Let's start with the first time
3 and then we can go on beyond that.

4 A. My job title is your question?

5 Q. Yes.

6 A. I think I was manager of the biomaterials science
7 division when I first saw that kind of data, that I can
8 recall.

9 Prior to that, I didn't have any real projects
10 that involved anything like that.

11 Q. So that would have been sometime between --
12 sometime after 1981?

13 A. That's probably true, yeah. Although I don't know
14 that I didn't see data before then.

15 Q. But it wasn't something that would have been part
16 of the scope of the work that you were doing to
necessarily

17 be looking at that type of data? Correct?

18 A. Most likely not, but possibly I could have. I
19 don't want to be -- say I didn't and then somehow I did,
but

20 I don't think so.

21 Q. You don't want some document being shown to you
22 and saying "There's your name, Jerry Whidby."

23 A. Send it to me.

24 Q. That's not -- I'm not asking you that. I'm asking
25 you for your memory and your best memory and based on the

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1 type of work that you did, is that likely something that
you

2 think you were aware of or being shown?

3 A. In the normal course of doing work at Philip
4 Morris, I, of course, knew about INBIFO and the kind of
work

5 that they did. I may have seen results from the
laboratory

6 prior to the '81 time frame. I may have.

7 Q. May have. But you have no recollection of that?

8 A. No, I don't. I don't.

9 Q. And you believe that based on the type of work
10 that you were doing then versus when you became manager of
11 biomaterials science division, it wasn't something that

you
12 needed to see in the course of the work that you were
13 doing? Is that correct? This is before you were made
14 manager.

15 A. Yes, that's generally true, I think.

16 Q. Okay. This first time that you were familiar with

17 seeing this Ames-type testing that we're talking about,
what

18 was being tested?

19 A. The first one I believe I recall was it dealt with
20 the denitrification process that we were working on, NOD
21 process.

22 Q. You said there were other times besides that first
23 time. Can you recall what was being tested in any of
these

24 other times?

25 A. It could be a number of other things. It could

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1 have been some of the work that we were doing -- it could
be

2 curing. I don't know. I don't recall.

3 Q. All right. When you say "curing," what are you
4 speaking of?

5 A. The curing of tobacco. Curing processes for
6 tobacco.

7 Q. And what specifically are you making reference to?

8 A. Investigating the curing processes for tobacco.

9 Q. To see what?

10 A. To see what -- how you can modify, change the
11 process, change the taste of the tobacco, the chemistry of
12 the tobacco.

13 Q. Was any of this work with respect to the curing
14 that you're talking about being done with respect to
safety

15 and health?

16 A. Most of the work that we -- that I did or we were
17 doing was directed toward reducing various constituents
that

18 are in either the tobacco or smoke, so that yes, I guess
so.

19 Q. What constituents were you looking to reduce?

20 MS. MASON: In the curing process?

21 MS. CHABER: Q. In any of the work.

22 A. For example, nitrates.

23 Q. What else?

24 A. Nitrosamines. Oxides of nitrogen. That's -- I
25 can't think of others specifically, but there were others,

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1 I'm sure.

2 Q. Did you ever work on any nicotine analog programs?

3 A. I worked on -- I -- while I was in the analytical
4 group I worked on nicotine analogs, yes.

5 Q. Which ones?

6 A. I can't recall specifically, but a large number.

7 They were brought to the laboratory.

8 Q. You can't remember any of the names?

9 A. I probably could draw you structures, but I'm not
10 an organic chemist.

11 Q. Is nicotine toxic?

12 A. Yes, it is.

13 Q. At what level?

14 A. I don't know what the LD 50 for nicotine is. I'm
15 not a toxicologist, so I can't tell you.

16 Q. Is nicotine -- can it be deadly?

17 A. Yes, ma'am.

18 Q. Do you know anyone who ever got killed by nicotine
19 that worked at Philip Morris?

20 A. Yes, ma'am, I do.
21 Q. Who would that be?
22 A. I can't recall her name.
23 Q. Was she somebody who worked in the physical
24 research division?
25 A. I believe that's right, yes. I was not in the

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1 physical research division at the time.
2 Q. Did you know this person?
3 A. Yes. Casually, as a co-worker.
4 Q. Was the name Pamela Phillips?
5 A. Yes, ma'am, I think that's right.
6 Q. And she actually committed suicide with nicotine?
7 A. Yes, she did.
8 Q. Nicotine that she got from Philip Morris?
9 A. I don't know that, but I don't argue with that.
10 Q. What did you do with respect to analogs?
11 A. I was an analytical chemist working in the NMR
12 laboratory.

13 Q. N --

14 A. MR. Nuclear magnetic resonance.

15 Q. And what did you do there?

16 A. I identified these compounds that the organic
17 chemists were making to assay them for purity to some
18 extent; to look at how these compounds in some cases
behaved

19 in solutions; what was their conformation.

20 Q. Conformation?

21 A. Conformation. How they arranged themselves in
22 solution.

23 Q. And what was the purpose of that, of determining
24 that?

25 A. It was of interest to see which ones would have

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1 similar conformations in nicotine solution. We were
2 interested in that. Or what was their conformation to be
3 able to compare to other types of compounds in -- in
4 solution.

5 Q. Did you ever work with pyridine? P-Y-R-I-D-I-N-E,
6 I believe.

7 A. Pyridine.

8 Q. Pyridine?

9 A. That's close. Spelling always works.

10 Q. I spelled it right but can't pronounce it, right?

11 A. Chemists have their own pronunciation for stuff, I
12 guess. I mean yeah, it's a common chemical. It's found
in

13 most laboratories.

14 Q. Did you work with it as a nicotine analog?

15 A. I don't think it is a nicotine analog. It's a
16 very simple molecule.

17 Q. Is it related to nicotine?

18 A. It's sort of a piece of nicotine. I don't think
19 it's related to nicotine.

20 Q. When you say a piece of nicotine?

21 A. Nicotine is a pyrrolidine ring stuck on a pyridine
22 ring type. Again, I could draw you a structure of it.

23 Q. Okay. Why don't you. I'm handing you a --

24 A. Piece of paper?

25 Q. -- piece of paper. A lined piece of paper.

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1 A. That's nicotine (indicating).
2 Q. Okay. You've drawn a structure at the top of the
3 page, and that's the structure of nicotine?
4 A. Right.
5 Q. Okay.
6 A. Pyridine would be this part of the molecule
7 (indicating).
8 Q. And you've circled part of it.
9 A. Um-hmm.
10 Q. Okay. And that's pyridine?
11 A. Um-hmm.
12 Q. What is the other part?
13 A. That would be pyrrolidine.
14 Q. Now you've circled two parts, so we need you to
15 draw arrows to determine which is which.
16 A. That's pyridine (indicating).
17 Q. This is a test of your skills because you're
18 writing upside down.
19 A. I'm dyslexic, so it doesn't matter. This is
20 pyrrolidine. I won't do that (indicating).
21 Q. All right. So pyridine is a --
22 A. Is one of the -- sort of an aromatic portion of
23 the nicotine molecule.
24 MS. CHABER: All right. Let's have this
25 upside-down drawing attached as Plaintiff's 4.

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1 (Exhibit 4 marked.)
2 THE WITNESS: I should have done it on a black
3 board.
4 MS. CHABER: It would be hard to attach a black
5 board.
6 Q. Is pyridine toxic?
7 A. I don't know. I mean we could look it up. I
8 could look it up and tell you what its toxicity is. I'm
9 sure on some level it's toxic.
10 Q. Do you know whether it is more or less toxic than
11 nicotine?
12 A. I'm assuming less, but I don't know. I am making
13 the assumption that it is less.
14 Q. Do you know if it has central nervous system
15 effects?
16 A. I don't know whether it does or doesn't.
17 Q. Do you know that nicotine has central nervous
18 system --
19 A. Yes, I do.
20 Q. Do you know whether or not Philip Morris added
21 pyridine to tobacco?
22 A. I don't know whether they do or don't.
23 Q. And that answer would be true for the entire time
24 you worked for them?
25 A. Yes.

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153

1 Q. Do you know if any of the nicotine analogs that
2 are developed at Philip Morris are similar to pyridine?
3 A. I don't know what you mean by similar, but some of
4 the compounds that were developed had pyridine as part of
5 the molecule.
6 Q. Do you know which ones those are?
7 A. No, I don't. If you gave me a list of those I
8 could tell you which ones those are.

9 Q. What?

10 A. If you had a list of the analogs I could pull it
11 out and let you see it. The ones that would have pyridine
12 as part of the molecule.

13 Q. You have this big vision of little boxes and
14 rectangles and hexagons and so forth?

15 A. That's the way a chemist thinks. You guys think
16 in words, we think in pictures. We're real simple.

17 Q. Just wanted to make sure we were on the same
18 wavelength here.

19 Do you know whether or not any of the compounds
20 identified as nicotine analogs by Philip Morris are found
in
21 any of the flavors that Philip Morris adds to its
22 cigarettes?

23 A. To my knowledge, they're not. But I don't know
24 for a fact they're not because I don't know all the flavor
25 formula.

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1 Q. Who does know the flavor formulas?

2 A. I don't know of any one person that would.

3 Q. What persons, if we wanted to know all the
4 flavors, what people would we have to go to to get that
5 information?

6 A. I would think it would be a number of people. And
7 I don't know all the number. I don't know all the people
8 you would assemble to get those.

9 Q. Well, can you give me the ones that you do know
10 that would have at least some portion of that answer?

11 A. Some. One person would probably be Richard Cox.
12 Dr. Richard Cox. This is an assumption on my part. If
you
13 want me to assume another person, I can do that simply
14 because of the title he has now.

15 Q. Okay. Yes.

16 A. That would be Urs Nyffler. U-R-S, N-Y-F-F-L-E-R,
17 I believe.

18 Q. Is he somebody presently working with Philip
19 Morris?

20 A. Yes.

21 Q. And is Cox presently working --

22 A. Yes.

23 Q. -- at Philip Morris?

24 A. Now, I don't believe they would have knowledge of
25 an entire flavor formula, but they might. And who else

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1 you'd put together with that, I don't know at this point.

2 Q. Are you aware of any INBIFO files being maintained
3 in Richmond?

4 MS. MASON: I'll just object. Vague as to INBIFO
5 files.

6 THE WITNESS: We have a large central files in
7 Richmond which contains a lot of the work, I think
8 practically all the work that's been done at Philip
Morris.

9 And that probably has a great deal of INBIFO information
in
10 it. I don't know what you mean by the INBIFO files other
11 than that.

12 MS. CHABER: Q. Do you know whether contained
13 within these large central files in Richmond there are any

14 files from INBIFO on biological activity testing?
15 A. I believe there are.
16 Q. Do you know whether or not there are any INBIFO
17 files maintained in Richmond on the testing on animals?
18 A. There probably are.
19 Q. Have you seen them?
20 A. I probably have.
21 Q. When?
22 A. In the '90s, again.
23 Q. And was this as part of your job? Or part of work
24 done with respect to litigation?
25 A. I need to ask a question about litigation.

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1 MS. MASON: Okay.
2 (Counsel and Witness briefly leave the conference
3 room.)
4 MS. CHABER: Q. You can answer that last
5 question, I take it?
6 A. Both. Both for litigation and for normal course
7 of the work.
8 Q. Okay. And what were the biological activity
9 reports or files that you saw from INBIFO? What did they
10 relate to?
11 A. They related to several projects. One was a
12 project that most recently you asked me about before, the
13 ignition propensity reduction project.
14 The other was the Accord project that we were
15 working on.
16 And earlier, some work we did on denitrification,
17 curing. Those were inhalation -- internal inhalation-type
18 studies that were done. And other types of studies that
19 they did.
20 Q. The ignition propensity reduction biological
21 activity studies, what did they demonstrate with respect
to
22 biological activity of the cigarettes that you were
working
23 on?
24 A. The cigarette that we eventually -- the process
25 and product that we are going to test market with right
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1 away, the results we got was that there was no difference
2 between that modified product and the unmodified product
as
3 far as if you put a band of paper on it versus not putting
a
4 band of paper on it there was no difference from a
5 biological testing point.
6 Q. And when you say no difference, were they both
7 equally as safe?
8 A. There's no such thing as a safe cigarette. Either
9 a fire-safe cigarette or, as far as it goes, from a
toxicity
10 point of view. They were -- they were the same.
11 Q. So if I understand correctly, both the fire-safe
12 cigarette, if we can call it that.
13 A. Fire-safer cigarette.
14 Q. Fire-safer cigarette and the cigarettes that are
15 currently sold on the market both cause human disease?
16 A. They both may cause human disease. That was not
17 part of the testing that they were doing over there, I

don't

18 think.

19 Q. What was the testing, then?

20 A. The type of testing that was being done was to
21 look at the inhalation of those products and other tests
22 that they were doing, such as the Ames test, to see if
they

23 were different from each other as far as those tests go.

24 Q. Do you know what was being compared?

25 A. The unmodified -- what we did is to take the

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1 paper -- this is the banded paper project or the reduced
2 ignition project was to put this new paper on a cigarette
3 and evaluate it versus the unmodified cigarettes. So
that's

4 what we did. We evaluated the paper on two different
5 products. The same tobacco, same filter, just the paper
6 different on this one versus that one. It had the same
tar

7 delivery, same nicotine delivery.

8 Q. And did you evaluate them to see whether or not
9 those cigarettes with the same nicotine delivery, tar
10 delivery but different papers, whether they had the
11 potential for causing disease in human beings?

12 A. What -- what they did was to do the inhalation
13 studies, the salmonella studies or the Ames test and
others,

14 and on those tests they were equivalent if not identical
15 between the two pair. I don't know how they related to
the

16 disease states or whatever in people.

17 Q. So if I understand correctly, what you're saying
18 is whatever the disease potential was for the cigarette
that

19 the ignition-safer cigarette was being compared to,
whatever

20 that disease potential, these were no worse? Is that a
fair

21 statement?

22 A. I don't know that I can say that. All I can say
23 is on this test that they were running they were no
24 different. And I'll have to leave it to the experts in
that

25 area, the toxicologists, to make the type of statements
that

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1 you're making, if they can.

2 Q. And who are the toxicologists that you would defer
3 to?

4 A. There's -- there's people that I would have
5 referred to and people being referred to now may be
6 different because some people perhaps have retired. But
7 Rick Solana I think currently is in charge of that group.

8 Q. I think we went through that name and the spelling
9 the last time around.

10 A. That's right. I remember that name.

11 Q. Is Mr. Burnleigh or Dr. Burnleigh a toxicologist?

12 A. It's Mr. Burnleigh, and to my knowledge, he's not.

13 Q. And I take it James Morgan never had the position
14 of being a toxicologist?

15 A. No, ma'am, not to my knowledge.

16 Q. He was a marketing person, right?
17 A. Yes, ma'am. That's correct. That's what I
18 understand.
19 Q. And did you in your position at any time during
20 your time at Philip Morris have dealings with the
marketing
21 department?
22 A. Yes, I did.
23 Q. And what would be the nature of that?
24 A. There was two times that I was associated with --
25 we had marketing people working pretty closely with us.

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1 One was with the banded paper product, trying
2 to -- with them trying to understand what the product was
so
3 they can communicate that.
4 And the other was -- would be the Accord product.
5 Q. And who did you have dealings with from marketing?
6 A. The same person for both. I can't recall his name
7 right now. Maybe I will in a little bit.
8 Q. Do you know what position that person held?
9 A. He was actually assigned to the Accord project for
10 a period of time to work with the people on Accord and
11 development of Accord so he could fully understand the
12 product.
13 I believe he's a director or VP now. I --
14 Q. But you can't think of his name right now?
15 A. I believe his name is Tom Garjulio. I'll try.
16 G-A-R-J-U-L-I-O, or at least that's phonetically how I --
17 Garjulio.
18 He worked both with the Accord project -- I don't
19 think he's working with the Accord anymore, somebody else
is
20 doing that probably. But he worked with us recently on
the
21 banded paper product.
22 Q. Did you ever meet Mr. James Morgan?
23 A. Yes.
24 Q. When?
25 A. Many times.

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1 Q. And what were the circumstances?
2 A. He was -- before he most recently retired, I think
3 he was president or CEO or whatever of PM U.S.A., but he
was
4 the big boss, so to speak.
5 Q. And what would be your interactions with him?
6 A. Presentations to him on technologies that were
7 being developed or under development. Since I was a
8 technology fellow, I told him about some of that stuff
such
9 as the banded product and the Accord, kept him informed of
10 that.
11 Q. And when he was involved in marketing, did you
12 have meetings with him?
13 A. I remember making -- I remember him -- him being
14 present during some of our technology presentations, yes.
15 It may not have been directed specifically to him, but he
16 was there.
17 Q. Were you at any meetings where -- and I -- strike

18 that.

19 I take it Mr. Morgan was located in corporate
20 offices? That's where he worked out of?

21 A. He worked out of New York.

22 Q. And that's where the corporate offices are?

23 A. Corporate offices are in New York, yes.

24 Q. Do you know if that's where he worked?

25 A. To my knowledge, that's where he worked, yes.

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1 Q. Okay. Do you know of any research offices in New
2 York?

3 A. No, I do not.

4 Q. Do you recall being at any meetings where
5 Mr. Morgan was present where there were any presentations
6 with respect to biological activity?

7 MS. MASON: I'm sorry. I'll object as vague. I
8 don't know if you understand that question.

9 You mean results of biological activity research?

10 MS. CHABER: Q. That's good.

11 A. Specifically, I don't remember any. However, in
12 discussing the Accord project and the banded paper
project,

13 as a normal course of discussing that, that would be
14 mentioned as to what kind of biological testing -- what
the

15 results from that were.

16 Q. Do you know if the Accord as a whole, as opposed
17 to its component parts, has been tested with respect to
18 biological activity?

19 A. I'm sorry. I'm not trying to be dense or vague or
20 whatever. But its component parts would be the battery
and

21 the --

22 Q. No.

23 A. Okay.

24 Q. With respect -- let me hear my question back and
25 I'll fix it.

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1 (Question read as follows:

2 Q. Do you know if the Accord as a whole, as
3 opposed to its component parts, has been tested
4 with respect to biological activity?)

5 MS. CHABER: Q. Substitute the word "constituent
6 parts" and the word "constituents."

7 A. Can I explain my difficulty perhaps?

8 Q. Sure.

9 A. I'm not trying to be funny.

10 Q. Hey, I'll take whatever help I can get from
11 whatever sources.

12 A. The Accord is made up of a number of individual
13 components: The battery, the heater, the heater blades,
14 the plastic that surrounds it, the electronics that are in
15 it, the noise it may generate when it fires to heat the
16 cigarette, the paper that goes into the cigarette, the
17 filter that goes on the cigarette. All those individual
18 things had to go through some sort of an evaluation. All
19 right?

20 Q. Okay.

21 A. The battery had to be tested for safety or this
22 kind of thing. All those things were done.

23 Now, I don't know whether that's biological

24 testing or not, but certainly you're interested in safety
25 there, so in the broadest sense, perhaps it is.

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1 Q. And what I'm trying to understand is you're
2 talking about each of these being tested as components of
3 this greater whole.

4 A. Right.

5 Q. And I'm trying to find out was the greater whole
6 tested to see what its biological activity potential was?

7 A. To my knowledge, the Accord cigarette was smoked
8 in the Accord lighter, generating smoke that was evaluated
9 in a number of biological tests.

10 Q. Can you tell me what those were?

11 A. Inhalation tests, you know, that INBIFO does.
12 They call them 90-day inhalation tests, I think. I'm sure
13 salmonella activity tests or Ames tests, and others.
14 Whatever battery of tests they can throw at it, as well as
15 chemical constituents were evaluated on that. And
16 Mr. Morgan probably saw the data on that. And you asked
17 that question.

18 Q. Did you?

19 A. Yeah.

20 Q. What was the result of the 90-day -- first of all,
21 who was the 90-day inhalation test conducted on?

22 A. On animals.

23 Q. What animals?

24 A. I think it's rats. I believe that's right.

25 Q. And what were the results with respect to whether

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1 or not there was any biological activity?

2 A. The results that I saw indicated that the
3 biological activity of the Accord product is lower than a
4 very low Kentucky reference type cigarette.

5 Q. And what does that mean, lower?

6 A. To me, that means it's lower in toxicity. I don't
7 know what that means -- I mean I can't know any more than
8 that. I don't know any more than that. I'm not an expert
9 in that area.

10 Q. Was it still toxic?

11 A. I don't think that Accord is a safe cigarette.

12 Yes, in most cases I think it probably is still toxic.

13 Q. Do you think it's a safer cigarette?

14 A. I think -- again, probably you need to ask an
15 expert in that area. Personally, I believe that it is a
16 lower-risk cigarette. It has lower -- it is lower
17 significantly in a number of compounds that we've been

told

18 to work on and try to lower --

19 Q. What --

20 A. -- that I have worked personally on over the
21 years.

22 Q. And what compounds were those?

23 A. Benzo(a)pyrenes. Carbon monoxide. Nitrosamines.

24 A number of things. A whole host of things. Those have
25 been published.

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1 Q. What has been published?

2 A. The results from these tests.

3 Q. From the Accord tests?

4 A. Yes. I think it's the Society of Toxicology, I

5 believe it was last year. It may have been the year
6 before. I guess it was the year before.

7 Similarly, we're going to publish the results from
8 the banded paper testing.

9 Q. Do you know of the results from any testing of any
10 commercially-sold Philip Morris cigarette?

11 MS. MASON: Can I have that read back, please?

12 (Question read as follows:

13 Q. Do you know of the results from any
14 testing of any commercially-sold Philip Morris
15 cigarette?)

16 MS. MASON: Any testing? Okay. It's rather
17 broad. I don't know if you will get a chemical answer
18 instead of what you're after for that one.

19 THE WITNESS: Yes.

20 MS. CHABER: Q. And tell me what types of testing
21 you're aware, or the results, rather.

22 A. Yeah, the results. Obviously, we test tar and
23 nicotine, carbon monoxide. That's done under the
guidelines

24 of the Federal Trade Commission. We do that and publish
25 that on all the brands sold in the U.S. every year.

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1 Beyond that, recently working with the
2 Commonwealth of Massachusetts, we evaluated 28 commercial
3 cigarettes for the smoke constituents that are in those
4 cigarettes and smoking the cigarettes at the conditions
that

5 are prescribed by Massachusetts. And what we've found is
--

6 and there was a whole host of constituents evaluated.

That

7 data is to be presented to Dr. Connolly in Massachusetts
8 Wednesday of this week, and that will also be published
and

9 made public.

10 Q. And were some --

11 A. What kind of -- sorry.

12 Q. Yes. Go ahead. You weren't finished with your --

13 A. No. That's okay.

14 Q. No, no. You weren't finished with your answer.

15 A. I said --

16 Q. I was looking down and I didn't mean to interrupt.

17 A. Also, what will be done with that is once -- once

18 all that's presented to Dr. Connolly this coming

Wednesday,

19 we'll put together -- and it's a huge amount of work done
by

20 the four companies, the four major tobacco companies,
21 Reynolds, Philip Morris, Lorillard and Brown & Williamson,
22 that will be published and made available to the public.

23 Q. And do they rate and rank the cigarettes, the
24 various commercial cigarettes from -- with respect to
smoke

25 constituents and risk levels?

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1 A. It allows you to rank order the cigarettes that we
2 evaluated. I believe there was 28 cigarettes that we
3 evaluated from very low delivery cigarettes to very high
4 delivery non-filtered cigarettes as far as the
concentration

5 of the constituent in the smoke from that cigarette.
6 There is no ranking in that report that I'm aware
7 of or will be in that report that assigns -- you said risk
8 to it or whatever?

9 Q. Where did -- they go from low to high?
10 A. Yes.

11 Q. Where does Marlboro Reds rate?
12 A. Marlboro Reds is -- has a delivery of about 15
13 milligrams. The lowest one we tested was about 1
14 milligram. The highest we tested I believe was about 28
15 milligrams of tar. These are all tar numbers.

16 So Marlboro Red falls somewhere in the middle.

17 Q. What about Marlboro Lights?
18 A. Marlboro Lights falls below the middle. It has a
19 delivery of somewhere around 10 or 11 milligrams of tar.
20 And most of the constituents we looked at and evaluated
21 paralleled tar or nicotine. If tar goes up, these
22 constituents generally go up. If the tar goes down in a
23 particular cigarette, these constituents generally go
down.

24 Q. And where did Camel Regular fall?
25 A. I don't know where Camel Regular fell, nor do I

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1 know for sure that we evaluated Camel regular in the list.
2 If we did, it would fall pretty much where its tar
3 level was, whatever its tar number is.

4 Q. What about Camel Lights?
5 A. Again, I don't know what the tar level is for
6 Camel Lights, but it would fall, again, wherever the tar
7 level for Camel Lights is.

8 Q. And it's true that the FTC numbers as reported
9 today are not what the measured tar and nicotine numbers
10 were when certain smoking behaviors and occlusion of vent
11 holes and so forth were taken into account?

12 MS. MASON: Objection. Vague. You mean in the
13 Massachusetts test?
14 MS. CHABER: Yes.

15 THE WITNESS: As we discussed before I think, the
16 general rule of thumb between the FTC numbers and the
17 Massachusetts numbers is you get approximately, although
not
18 exactly, approximately a factor of 2 increase in the tar
19 when you go from the FTC current value to the
Massachusetts
20 current value.

21 MS. CHABER: Q. But that varied, I thought you
22 had told me.
23 A. Slightly, yes.

24 Q. And so there were actual measured numbers using
25 the parameters as opposed to this modeling approach --

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1 A. Yes.
2 Q. -- that you helped do work on?
3 A. Yes. And these constituents were measured.
4 Q. And what constituents were measured?
5 A. A wide array of constituents. And I can't name
6 them all, but I can tell you some of them.
7 Q. Okay.
8 A. There was a number of phenol-like compounds
9 measured.
10 There was a number of nitrosamines measured.

11 There were a number of heavy metals measured.
12 There were a number of -- did I say nitrosamines
13 already?
14 Q. Yes.
15 A. Benzo(a)pyrazine was measured. A whole list.
16 I -- I can't recall more. I'm sure -- I know there were
17 more, many more.
18 Q. And what happened to nicotine levels as measured
19 when the parameters used in the Massachusetts testing were
20 put into place? Were they different than what's reported?
21 A. In general terms. In general terms, if you look
22 at the FTC numbers for nicotine and the Massachusetts
number
23 for nicotine, the Massachusetts number would be up by a
24 factor of 2 in general terms.
25 Q. Measured -- but those amounts were actually
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1 measured under these other parameters, correct?
2 A. Yes, ma'am, they were. And that general rule
3 pretty much held.
4 Q. Do you know what the nicotine level of Marlboro
5 Reds was?
6 A. Maybe we need to go back and look at the Marlboro
7 number I gave you before. I was quoting the FTC number
for
8 Marlboro.
9 Q. Oh, okay. So the number of 15 milligrams that you
10 gave me was the FTC number?
11 A. That's correct. Yes.
12 Q. Do you know what the measured delivery number
13 actual, not calculated, was with respect to Marlboro Reds?
14 A. No, I don't.
15 MS. MASON: Under the Massachusetts test?
16 MS. CHABER: Yes.
17 THE WITNESS: No. I don't recall.
18 MS. CHABER: Q. Do you know whether it was two
19 times or whether it was more than two times?
20 A. I recall that it was about two times. It -- this
21 particular piece of work, current piece of work that we
did
22 continued to support the model and the concept that it's
23 about a factor of two.
24 Q. With some being higher and some being lower?
25 A. Some being higher and some being slightly lower,
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1 that's right.
2 Q. Okay. And do you know whether any of the Philip
3 Morris brands were lower than the approximately two times
4 number?
5 A. I don't recall.
6 Q. Do you know whether the Marlboro Lights were two
7 times, or whether they were higher or lower than that two
8 times?
9 A. I don't recall that, either. They were measured.
10 Those numbers will be available. I just don't recall the
11 whole --
12 Q. Right. You're releasing them --
13 A. -- thousands and thousands of numbers.
14 Q. You're releasing them Wednesday to Dr. Connolly?
15 A. Dr. Connolly, that's correct.
16 Q. But you don't know when they're being released to

17 the public yet?
18 A. I don't know when -- when he will choose to do
19 that. We think we can have a report ready within a month
or
20 so to release to the public. We would like to publish all
21 of that.
22 Q. Why do you think it's important to give the public
23 that information?
24 A. I think it's good to put it into the scientific
25 community so that they will have what we believe will be
the

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1 best test methods that are available for evaluating these
2 particular constituents. They'll have an idea of what the
3 range of those constituents are in the commercial
products.

4 Q. Are you familiar with a nicotine analog WS-14?
5 Strike that. Let me ask that differently.
6 Are you familiar with a menthol analog WS-14?
7 A. Yes.
8 Q. No wonder you couldn't --
9 A. I was having a hard time.
10 Q. I know. North Wind? Does that sound like a
11 cigarette brand you recall?
12 A. Yes.
13 Q. And that was a cigarette brand that used WS-14 as
14 a menthol analog?

15 A. That's my understanding, yes.
16 Q. Something called chill blend?
17 A. I don't recall that.
18 Q. Do you know whether or not WS-14 had been GRAS
19 approved?
20 A. I don't know for a fact that that was. I don't
21 know that it wasn't, either. I just don't know.

22 Q. Do you know whether or not WS-14 was GRAE
23 approved?

24 A. No, ma'am, I don't.

25 Q. Do you know whether Philip Morris ever added any

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1 other material -- well, let's strike that.
2 Have you looked at the 1996 list of 599 additives
3 to cigarettes that the cigarette companies got together
and

4 put together as one document?
5 MS. MASON: Objection. I just think you
6 misspoke. Did you say '96?
7 MS. CHABER: I thought it was '96.
8 MS. MASON: I thought it was '94.
9 MS. CHABER: Okay. That could be. We're still
10 talking about the same document, though.
11 MS. MASON: Dr. Whidby may or may not know the
12 document, I don't know. But that will confuse him if
13 it's -- depending on which date it is.

14 MS. CHABER: Q. Are you familiar with a document
15 produced in 1994, I believe, that lists 599 additives to
16 cigarettes that was a compilation put together by all of
the
17 tobacco companies, additives to cigarettes?

18 A. I think so, yes.

19 Q. Has Philip Morris ever added any materials that
20 you're aware of that are not on that 599 list?

21 MS. MASON: Added materials to cigarettes, I
22 presume? To commercial brands?
23 MS. CHABER: Yes.
24 THE WITNESS: I don't know. But to my knowledge,
25 Philip Morris hasn't.

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1 MS. CHABER: Q. Do you know whether or not WS-14
2 was on that list?
3 A. I don't know.
4 Q. You're not aware of any material that Philip
5 Morris was using in 1994 that did not appear on that list

--
6 A. Not to my knowledge.
7 Q. -- of 599?
8 A. Not to my knowledge, no.
9 Q. What are cooked flavors?
10 A. In relationship to Philip Morris, it's a flavor
11 system that was used, may still be used, on the RL
product.

12 Q. That's the reconstituted leaf?

13 A. Yes, ma'am.

14 Q. And tell me what that system was.

15 A. I don't know.

16 Q. That's something you were privy to?

17 A. I've seen it, but I don't recall it. This is not
18 something that I tried to memorize or keep in my head.

19 Q. Do you know whether or not the process of cooked
20 flavors created nicotine-like compounds?

21 A. I don't think it did, but I don't know.

22 Q. Do you know whether or not the process of cooked
23 flavors created pyridine-like compounds?

24 A. Do you mean pyridine again?

25 Q. Pyridine. Sorry.

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1 A. I believe it did, but I'm not sure. I think
2 some -- some of the browning rations like in bread, it
ends

3 up with having a pyridine-type compounds in it. The bread
4 flavors are pyridine-type derivatives.

5 Q. What would happen if you had pyridine compounds in
6 tobacco? Would they enhance in any way nicotine?

7 A. I don't know. I don't think so.

8 Q. Do you believe pyridine has any pharmacological
9 effect?

10 A. It's outside my area of expertise, but I don't
11 know that it does. I don't know.

12 Q. You don't know that it doesn't, either?

13 A. I don't know that it doesn't, either. Right.

14 Q. Outside your expertise means either way, right?

15 A. Right.

16 Q. Okay. Do you use the Merck Index as a standard
17 chemical reference book?

18 A. I have a Merck Index on my desk, and I look at it
19 occasionally, yes.

20 Q. Do you know whether the Merck Index would tell you
21 whether or not pyridine -- I occasionally learn, but not
22 often -- has any pharmacological effect?

23 A. It might. It probably would. It has a listing of
24 a large number of common chemicals and tells you about the
25 LD 50 and whether or not they're toxic or not. If you are

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1 asking is pyridine toxic? I would go look in there and
find

2 out.

3 Q. And whether or not it had pharmacological --

4 A. At least it's a start.

5 Q. Where else would you look?

6 A. Again, not being an expert in the area. The Merck
7 Index will have references to the literature that they
8 derive that information from. Probably, if I were going
to
9 try to bone up on pyridine, I'd look in the literature,
and
10 probably go beyond that, you know, trying to follow it up
to
11 recent stuff.

12 Q. Do you have any involvement or did you have any
13 involvement while you were at Philip Morris with filling
out

14 any material safety data sheets?

15 A. I was supervising people who probably did get
16 directly involved in that. I never filled any out myself.

17 Q. And what types of substances would they be filling
18 out -- about which they would be filling out? Very poor
19 English, but I think you got the idea.

20 A. When they made a new compound or they were making
21 a new formulation or whatever, I think it's required that
a

22 MSDS be written on that and posted so that the people
coming
23 in contact or close to those formulas or compounds would
24 have information.

25 (Brief interruption in proceedings.)

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1 MS. CHABER: Could I have my last question again?

2 (Testimony read as follows:

3 Q. And what types of substances would they
4 be filling out -- about which they would be
5 filling out? Very poor English, but I think you
6 got the idea.

7 A. When they made a new compound or they
8 were making a new formulation or whatever, I think
9 it's required that a MSDS be written on that and
10 posted so that the people coming in contact or
11 close to those formulas or compounds would have
12 information.)

13 THE WITNESS: That was the end of my answer, I
14 think.

15 MS. CHABER: Can we actually take a five-minute
16 break? We've been going a while.

17 (Brief recess in proceedings - 3:06 to 3:18 pm.)

18 MS. CHABER: Q. What's methaprene?

19 A. Methaprene is a chemical that's -- I can't
20 remember the structure of it. It's a simple chemical.

It's

21 used as an insecticide, growth regulator, actually, for a
22 number of things.

23 Q. What are the number of things?

24 A. Cigarette beetle. I think it works on fleas. A
25 large number of insects.

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1 Q. Does Philip Morris use methaprene?
2 A. It has. I think it's discontinued the use of
3 methaprene.
4 Q. Do you know when?
5 A. No, I don't.
6 Q. In the 1970s and '80s was Philip Morris using
7 methaprene?
8 A. I don't know when they started using it and when
9 they stopped using it, but some period in the '80s or '90s
10 they were using it and after that they weren't. And I
don't
11 think -- I don't think they're using it now. I'm not
12 positive about that, though.
13 Q. Who would know the answer to that question that's
14 presently at Philip Morris?
15 A. I'm pretty sure Urs Nyffler would. Urs Nyffler,
16 the same name we had before.
17 Q. And methaprene isn't a flavor, is it?
18 A. No, it's not. I think it's used at such low
19 levels it's not -- I don't think you can detect the flavor
20 of it.
21 Q. It is a teratogen, isn't it?
22 A. I don't know that.
23 Q. Well, it works by preventing the tobacco beetle
24 from reproducing and creating additional tobacco beetles,
25 doesn't it?
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1 A. My understanding on its reaction on tobacco
2 beetles is it stops it from moving from one stage of
growth
3 to the next stage, and I don't remember which stage that
4 was. But it can't develop into a full adult, lay eggs and
5 reproduce.
6 Q. Do you recall a time period when you were at
7 Philip Morris that there was a concern over ammonia used
by
8 R.J. Reynolds?
9 MS. MASON: I'm going to object as vague as to
10 concern.
11 THE WITNESS: I can't remember. I can't remember
12 discussing or any discussion of ammonia used by Reynolds.
13 MS. CHABER: Q. You don't remember any
14 discussions?
15 A. Not that I recall.
16 Q. At all?
17 A. (Witness shakes head.)
18 Q. Do you know a John Lephhardt?
19 A. Yes, I do.
20 Q. And who was John Lephhardt?
21 A. John is an analytical chemist -- or was an
22 analytical chemist for Philip Morris. He has since
retired.
23 Q. Was he there in the 1980s?
24 A. Yes.
25 Q. Do you recall any presentations that you were at
180
181
1 that John Lephhardt made?
2 A. Yes.
3 Q. And what do you recall the subject matter of any
4 presentations that he made?
5 A. John was and I guess still is -- is an analytical

6 chemist, as I said. He's also an expert in infrared
7 spectroscopy. And most of the work he did was using
8 infrared spectroscopy for the identification of various
9 components or constituents in tobacco or smoke. So he
10 probably dealt with some of that.

11 Q. And did he, to your knowledge, look at other
12 brands, other companies' brands of cigarettes to see what
13 the constituents were?

14 A. I don't know that he did, and I also don't know
15 that he didn't. I don't specifically remember him making

a

16 presentation.

17 Q. Do you recall any presentations, discussions,
18 reports or memoranda from Mr. Lephardt regarding R.J.
19 Reynolds adding ammonia?

20 A. No, I don't. And it's Dr. Lephardt.

21 Q. Dr. Lephardt?

22 A. (Witness nods head.)

23 Q. Who was Joe Wasiuk?

24 A. Joe Wasiuk.

25 Q. Wasiuk?

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1 A. Joe used to be an employee of Philip Morris. He's
2 since retired, also. He was in the computer applications
3 division.

4 Q. And what did he do?

5 A. And he -- he is an expert in network systems.

6 Q. Did he work for Dr. Farone at any point?

7 A. I think he did. When Dr. Farone was director of
8 applied research, he was in the computer applications
9 division at the same time I was there. So yes,

indirectly,

10 he did. He was under Dr. Farone's supervision.

11 Q. Was Tom Van Auken?

12 A. Yes.

13 Q. Who is or was he?

14 A. He was an employee of Philip Morris.

15 Q. When and in what capacity?

16 A. He retired several years ago. He's an organic
17 chemist, and he retired a few years before I did.

18 Q. And what projects did he work on?

19 A. I'm not sure of all the projects he worked on, but
20 he was in general a synthetic organic chemist and would
make

21 compounds. Flavor compounds, perhaps.

22 Q. What kind?

23 A. Flavor.

24 Q. Do you know what compounds he worked on

25 specifically?

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1 A. I can't recall specifically.

2 Q. Who was Harry Daniels?

3 A. Harry Daniels -- I'm not sure what his degree is
4 in. I think it's Mr. Harry Daniels, previously worked
with

5 Mr. Joe Wasiuk and Dr. Tom Van Auken. I'm not sure -- I
6 don't know whether Harry is still working for Philip

Morris

7 or not. I think he retired the same time I did. He may
8 have retired a little bit before, but it's potentially
9 possible that he's still working there.

10 He -- at one time, he was in R&D several years
11 back and then moved out to -- I lost track of him. I
don't

12 know what job he was in before he retired.

13 Q. Are you familiar with him being promoted from R&D
14 to be a political liaison?

15 A. What I am familiar with -- I don't know whether he
16 was promoted or not. And I don't know whether he was a
17 political liaison or not. But I do know that he was on
the

18 City Council of Richmond. I mean that's what I know.

19 Q. Do you know if he was also the assistant campaign
20 manager for Senator Bateman?

21 A. I didn't know that.

22 Q. Representative Bateman? Who was Dick Thompson?

23 A. Dick Thompson was a director at Philip Morris.

24 Q. Of? Of what?

25 A. I think he was director of engineering or process

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1 development, I think.

2 Q. Who was William Dunn?

3 A. He was a scientist within Philip Morris.

4 Q. Working on what?

5 A. I think he -- his primary responsibilities, at
6 least he thought his primary responsibilities were trying
to

7 determine why people smoke.

8 Q. And did you review any of the memos or reports
9 that he made while you were working at Philip Morris
outside

10 of any litigation context in the 1990s?

11 A. I read a number of his reports.

12 Q. Is that something you would do in the normal
13 course and scope of your work?

14 A. It's something that -- that most of the scientists
15 within Philip Morris would read other people's work, yes.

16 He never reported to me nor did I ever report to him.

17 Q. Did you have any meetings or conversations with
18 Dr. Gaisch, G-A-I-S-C-H?

19 A. Do you know what his first name is? I think there
20 might have been two, but --

21 Q. Helmut?

22 A. Yes, Helmut Gaisch, yes. Over the years I talked
23 to Dr. Gaisch.

24 Q. And what would be the nature of the conversations
25 you would have with Dr. Gaisch?

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1 A. I don't recall specifically, but they must have
2 been about the type of work he was doing, the type of work

I
3 was doing. It was general scientific discussion.

4 Q. What was he doing?

5 A. I believe he was at INBIFO.

6 Q. He was working for International? Philip Morris
7 International?

8 A. I'm not sure whether he was in INBIFO or
9 Neuchatel, but one -- he was at one of the two places.

And

10 I don't know whether he worked for International or PM

11 U.S.A. or PM Incorporated. I don't know who -- who he was

12 paid by.

13 Q. In your previous deposition you had talked about
14 some patent suits in which you had either given deposition
15 testimony or been designated as an expert. Can you tell
me

16 what the specific patents that were involved were?

17 A. Can I name the titles of the patents? I don't
18 think so. The general areas I can tell you about.

19 Q. Okay.

20 A. General area dealt with the expansion of tobacco.

21 Q. And if I understood correctly, both R.J. Reynolds
22 and Japan Tobacco were claiming that Philip Morris was
23 infringing their methodology -- was it methodology?

24 A. Their patent. How they -- right.

25 Q. Expanded tobacco?

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1 A. Right.

2 Q. So what was the difference between the methodology
3 that Philip Morris used for expanding tobacco and R.J.
4 Reynolds'?

5 A. R.J. Reynolds' was using freon-type compound in
6 their process to expand the tobacco at the time. And
Philip

7 Morris was using carbon dioxide in their process.

8 Reynolds maintained that the carbon dioxide
9 process was contained within their freon-based process.

10 Q. And what about Japan Tobacco, what was the
11 difference there?

12 A. I don't recall exactly. It wasn't quite as
13 clear-cut as that with the Japanese Tobacco Company. I
14 basically recall that we were infringing in an approved
15 process that we had patented after, subsequent to the
16 original patent, that we were infringing something that
the

17 Japanese Tobacco Company had discovered. And I can't
18 remember specifically what that was. A temperature, a
time,

19 a pressure. I don't know which, but something in that
20 nature. Something of that nature.

21 Q. And was there also one by Brown & Williamson?

22 A. Yes.

23 Q. And what was the claim there?

24 A. It was a claim that we were -- I believe it was
25 that we were infringing their patent -- or maybe we sued

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1 them. I don't remember which way it went. Again, it was
a

2 process-based claim, and I believe they were talking about
3 the method in the tower that was subsequent to the
4 impregnation of the carbon dioxide in the tobacco, then

you
5 take it out, heat it up and it causes the expansion. And
6 some configuration in the tower there they said they owned
7 that we were infringing on.

8 Q. Does Philip Morris own patents that it has not put
9 into commercial use?

10 A. Yes.

11 Q. Do you know how many?

12 A. No, I don't.

13 Q. Do you know how many patents that Philip Morris
14 owns that were put into commercial use?

15 A. I don't know that number, either. There's a lot
16 of patents that are out there that nobody ever -- ever is
17 able to commercialize. You can have a patent on a simple
18 idea that you never put -- never put to practice. You can
19 write patents all day long and get them patented and most
of
20 them end up being impractical.

21 Q. What's the point of patenting them, then?
22 A. The primary point of a patent is to be able to
23 have some pay-back on your research so that you have a
time
24 in the marketplace to be able to sell a particular process
25 or product or use that product in the marketplace before
the

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1 competition can, or they would pay you royalties on that.

2 Q. Have you been deposed or testified since November
3 to today?

4 A. November of last year? No, I haven't.

5 Q. Are you listed, to your knowledge, as an expert in
6 any other lawsuit?

7 A. I don't know.

8 Q. Do you have any arrangement with Philip Morris
9 whereby they notify you prior to listing you as an expert
in

10 a lawsuit?

11 A. I don't know that, either.

12 Q. You don't know whether you have an arrangement?

13 A. Unh-uh.

14 Q. What's your understanding with them?

15 A. I don't know I have one, whether or not they -- I
16 mean they -- they may have. They haven't asked me about
17 one. I don't think they have, but I don't have an
18 arrangement so that they would necessarily tell me or not.

19 I don't think they would without telling me, though.

20 Q. Do you have an understanding with Philip Morris
21 that they can list you as an expert without notifying you?

22 A. No, I don't.

23 Q. Have you been contacted in your consultancy
24 practice by any other tobacco company or lawyers on behalf
25 of any other tobacco company?

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1 A. No lawyers, no.

2 Q. Any other tobacco company? I didn't mean to jump
3 in there, but I didn't want you to limit --
4 A. Let me explain, I guess. And I don't think
5 it's -- there's an ASTM committee where we're looking at
6 improving -- or actually, developing and improving an
7 ignition propensity test. And I'm contacted by other
8 scientists from other companies about the details of that.

9 Q. Okay.

10 A. Similarly, in the Massachusetts work, I'm
11 contacted pretty frequently on a scientific basis by
people

12 at Reynolds or people at Brown & Williamson, people at
13 Lorillard about that particular work. But it's a
14 collaborative type work and we have to do that anyway.

15 Q. Who pays your bill while you are working on the
16 Massachusetts project?

17 A. Philip Morris.

18 Q. Who pays your bill while you're working on the
19 ASTM?
20 A. Philip Morris.
21 Q. What, if any, comparison testing has Philip Morris
22 done to determine the effectiveness of one filter versus
23 another with respect to carcinogens?
24 A. I've looked at the effectiveness of -- I don't
25 know what -- I'm not sure these are carcinogens, but let
me

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1 just tell you what I've done personally.
2 I've looked at the effect of triacetin on the
3 filtration efficiency of phenols, for example, and found
4 that triacetin with -- on a cellulose acetate filter is
good
5 for the removal of phenols, it enhances the phenol
removal.

6 Q. Excuse me. Any other testing you've done on the
7 effectiveness of filters?

8 A. When I first went to Philip Morris, I was working
9 on filtration efficiency of various materials. I looked
at
10 a large number, potentially large number of compounds at
11 that time and wrote several internal reports about the
12 effectiveness of various filter types, filter
13 constructions. And there's work, proprietary work, since
we

14 have a competitor in the room, proprietary work going on
now
15 within Philip Morris looking at various filter
16 configurations and filter types.

17 That has been and continues to be a big piece of
18 the work, or a fairly significant piece of the work that's
19 going on at Philip Morris, is how to improve the
filtration
20 efficiency of cigarettes for various constituents.

21 MS. CHABER: Could I hear the answer read back,
22 please.

23 (Testimony read as follows:

24 A. When I first went to Philip Morris, I
25 was working on filtration efficiency of various

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1 materials. I looked at a large number,
2 potentially large number of compounds at that time
3 and wrote several internal reports about the
4 effectiveness of various filter types, filter
5 constructions. And there's work, proprietary
6 work, since we have a competitor in the room...)

7 MS. CHABER: Q. What were the various material
8 compounds that you looked at, talking about in the past?

9 A. Are you asking about the filter material?

10 Q. The various material compounds that you made
11 reference to.

12 A. Perhaps I misspoke. There's various compounds
13 that I was looking at. Looking at nicotine filtration. I
14 looked at, as I said before, filtration of phenols. Gosh,

I
15 don't remember what else, but I mean that's been a long
time

16 ago. It's been 25 years ago. But I vaguely recall those.

17 Q. And you said there were internal reports?

18 A. Yes. Memos.

19 Q. And who would those be addressed to?

20 A. They're probably -- at that time they probably
21 were addressed to either Emanuel Bourlas, or Fritz Will.
22 They were my -- Emanuel Bourlas was my project leader, and
23 Fritz Will was the manager of the group.

24 Q. What years are we talking about?

25 A. We're probably talking '72, '73, '74, that time

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1 frame. But that was only -- that -- work like that has
gone

2 on up until, well, it's even going on today. Today is
3 Saturday. Yesterday.

4 Q. Who did it after you?

5 A. Dan Simpson was involved with it, I guess, and
6 continued it. Al Kassman was working on filtration. Alan
7 Kassman. Dr. Alan Kassman.

8 Again, there's a large number of people that have
9 worked on it over the years and continue to work on it.

10 Q. Did you do any comparison testing to see whether
11 one filter design was more efficient for the removal of
12 substances capable of biological activity than another?

13 A. In general terms, the work primarily was a
14 reduction of tar and nicotine and how that could be best
15 effected.

16 Q. Did you --

17 A. The tar and nicotine -- if the chemical
18 constituents within the tar are generally reduced, then
the
19 belief is that the harmful constituents that are in there
20 are also reduced.

21 Q. Did you do any specific testing on any particular
22 harmful constituents to see whether one filter was better
23 than another?

24 A. Well, phenol, we talked about earlier, was one.

25 Q. Okay. And what is the most effective filter for

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1 phenol?

2 A. The most effective one I know of is one that's in
3 cellulose acetate with triacetin.

4 MS. CHABER: Q. And what comparison testing was
5 done to determine that a cellulose acetate filter with
6 triacetone was the most effective --

7 A. Acetin.

8 Q. -- acetin was the most effective filter for the
9 removal of phenol?

10 A. I don't think I said it was the most. It's the
11 most I know about. I don't know of one that's better.

12 Q. Was there any comparison testing done with respect
13 to the removal of phenol between different filters?

14 A. If you look at the type of work that was done or
15 has been done, if you look at paper filters, for example,

16 paper filters are very efficient at removing tar but
they're

17 not very efficient at removing phenol.

18 Cellulose acetate, on the other hand, is not quite
19 as efficient, you have to use more cellulose acetate
fibers

20 in a more denser pack along a filter to get the same
amount

21 of tar out that you would with a paper filter. But a
22 cellulose acetate filter will remove -- suppose the
23 equivalent paper filter, cellulose acetate with triacetin
on
24 it takes out a proportional larger amount of phenol out of
25 it than the paper filter. That work was done.

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1 Q. And are you aware of comparison testing on that
2 topic?

3 A. I just described the comparison testing.

4 Q. And are you aware of there being reports or memos
5 evidencing and reflecting that testing?

6 A. I can't recall the specific memo or report. There
7 are memos and reports talking about tests like that.

8 Q. And are you aware of any comparison testing with
9 respect to cellulose acetate filters, either with or
without

10 triacetin and charcoal filters?

11 MS. MASON: For the removal of phenols?

12 MS. CHABER: For the removal of anything.

13 Q. Are you aware of any comparison testing with
14 charcoal filters?

15 MS. MASON: I'm going to object as vague. You may
16 understand that question. Is that to remove --

17 MS. CHABER: Anything.

18 THE WITNESS: I'm -- I'll tell you what I am aware
19 of charcoal filters versus cellulose acetate filters
versus

20 paper filters. There's a lot of work in the literature
that

21 describes the constituents that a cellulose acetate filter
22 removes. There's work in the literature that describes
the
23 constituents that a charcoal filter removes, and there's
24 literature that describes what paper filters remove.

25 Charcoal filters in general are efficient for

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1 vapor phase, a lot of the vapor-phase constituents because
2 they trap that. Unlike a paper filter, which simply --
they

3 trap specifically organic compounds, whereas a paper
filter

4 will trap the tar in general. The tar in general will
have

5 all these things in it.

6 Whereas a cellulose acetate filter is efficient
7 for the tar, also, but it has an affinity, if you will,

for
8 things like phenol. They dissolve in a cellulose acetate
9 filter and they don't get flushed out.

10 So that type of work has gone on since before I
11 was at Philip Morris. People were interested in how the
12 filters work.

13 Q. While you were at Philip Morris, were you aware of
14 there being any comparison testing done between these
15 various types of filters?

16 A. Yes. I think I just told you that. I am. I mean
17 that's the kind of work that was done, if you look at
Filter

18 A versus Filter B versus Filter C.

19 Q. If you, Jerry Whidby, were hired to design the

20 most efficient filter for the removal of any substances
that
21 are either potentially carcinogenic, mutagenic,
teratogenic,
22 or toxic or -- excuse me, or tumorogenic, what would that
23 filter look like?
24 A. Would that product have to be acceptable to the
25 consumer?

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1 Q. Let's talk first about what would be the most
2 efficient filter.
3 MS. MASON: But if you need to make any
4 presumptions in that answer, you need to tell us.
5 THE WITNESS: Okay. I'll presume and assume that
6 you're not worried about taste.
7 I'll presume and assume that you're not worried
8 about being able to sell the product.
9 And I'll presume and assume that you're not
10 concerned about the size of the filter; it does not have
to
11 fit on a conventional cigarette, so to speak.

12 So with those presumptions and assumptions, the
13 filter is going to look something like a Cambridge filter
14 pad which is designed to remove all the tar, backed up
with
15 probably a highly-absorbant material such as Tenex. Tenex
16 is used by analysts to trap vapor-phase materials and some
17 gas-phase materials, and you would use that on a cigarette
18 so that nothing would come out of it at the other end
except

19 some warm air, some warm oxygen plus -- some nitrogen and
20 oxygen.

21 MS. CHABER: Q. Okay. What is the next filter
22 you would design, Dr. Whidby, if you wanted somebody to
23 smoke the cigarette?

24 A. If you wanted it acceptable to the consumer?

25 Q. Well, let's -- why don't you define acceptable to

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1 the consumer. What does that mean to you?
2 A. Something that somebody will buy and use rather
3 than something that will sit on the shelf that is -- as an
4 example, that's something nobody is interested in.
5 Q. Doesn't acceptability have something to do with
6 what people understand it's being acceptable for? Like,
for
7 example, if they knew it wouldn't cause disease it might
be
8 more acceptable even though it doesn't taste quite as
good?

9 Would you agree with that proposition?
10 A. I think if I had to tell something -- somebody
11 that -- that "this product won't cause disease," I
certainly
12 can't sell them a cigarette.
13 Q. How about it will cause significant amount less of
14 disease? Still can't sell the cigarette?
15 A. I think products that are on the marketplace now
16 are substantially better in -- than the products that were
17 on the marketplace in the '50s. I can't say that those
will
18 not cause a disease. I can't say that. I mean I just --

I
19 couldn't tell you that.
20 Q. Better from what standpoint? Do they cause less
21 disease than the products that were on the marketplace in
22 the 1950s?
23 A. I think you have substantially less exposure to
24 the constituents that are in smoke in the products that
are
25 on the market today versus the ones that were in the
market

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1 in the '50s.
2 Q. How much less?
3 A. For example, I think -- these numbers may not be
4 exactly accurate, but in the '50s, the sales weighted tar
5 numbers were in the 30s. The sales weighted tar numbers
now
6 are approximately 10.

7 Q. You're talking about FTC methodology?
8 A. Yes. Yes. Or you can talk about Massachusetts
9 numbers. If you want to talk about Massachusetts numbers,
10 the products in the marketplace in the '50s probably were
in
11 the 60s.

12 Q. How do you know that, sir? Those products didn't
13 have vent holes or any of the other parameters that are
14 being accounted for in the Massachusetts protocol, did
they?

15 A. Right. They didn't have vent holes, but they have
16 the parameters accounted for in the Massachusetts, because
17 in the Massachusetts the primary thing that drives these
18 high delivery products higher is puffing more frequently
and
19 taking a bigger puff. And we do that in the Massachusetts
20 protocol. And when we do that in the Massachusetts
21 protocol, those high delivery cigarettes bump up by almost
a

22 factor of two, as I said before.

23 Q. And you think that people's smoking patterns were
24 the same in the 1950s as they are --

25 A. I don't know.

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1 Q. -- in the Massachusetts protocol?
2 A. I don't know. I don't know what their smoking
3 parameters were then. I suspect they haven't changed a
4 whole lot, but I don't know that.
5 Q. Well, isn't one of the reasons that people puff
6 more frequently and puff harder because they need to make
up
7 for the lowered nicotine?

8 A. I don't know that they puff more frequently or
9 puff harder. And there's some reports in the literature
10 that I've read that says for a period of time people who
11 switch do puff more frequently and puff harder, but after
a

12 while they go back to their original puffing patterns.

13 Q. And what literature are you referring to?

14 A. I have to be a bit vague on this because I don't
15 recall the exact documents that I've seen on that, but I
16 have seen something that says that.

17 Q. You don't know the name? You don't know where it

18 was published?

19 A. No.

20 Q. You don't know anything about it?

21 A. No, I don't.

22 Q. You just saw it somewhere?

23 A. I saw it in the literature.

24 Q. Did somebody ask you to look at it?

25 A. No.

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1 Q. Did you research it?

2 A. No.

3 Q. You just came across it?

4 A. In -- in the process of working with Massachusetts
5 and Texas and the FTC, I've seen some of these documents
6 that talked about compensation. But I haven't researched
it

7 in order to -- I don't remember specifically the
documents.

8 Q. So designing a filter for a cigarette that -- put
9 it this way: What is the safest filter cigarette design
10 that you could come up with that you believe people would
11 still purchase?

12 A. The safest one that I could think of -- and again,
13 it's not safe -- are the ones that are in the marketplace
14 today.

15 Q. You don't think there's anything available that's
16 any safer that's technologically feasible than what exists
17 out there?

18 A. No, because if I did I think we'd have it in the
19 marketplace. I was in a position to work on those, and
I'll

20 tell you, I think we would have had it out there.

21 Q. Did you work on Vantage?

22 A. I worked on filters like Vantage.

23 I think one of the most efficient filters that is
24 on the marketplace now that gives the best taste is on the
25 Merit Ultima. It's a paper core concentric filter. It
does

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1 a fantastic job in reducing tar and nicotine.

2 Q. And that's the best filter?

3 A. In my opinion it's certainly one of the best
4 filters, if not the best filter.

5 Q. Ever try it out on a Marlboro and see whether or
6 not people would smoke it?

7 A. Marlboro has a Marlboro Ultra Lights, as you may
8 or may not know, that does not employ that technology, but
9 that technology is available in the Merit family, and it's
10 not a big seller.

11 Q. Do you know whether or not anybody has ever tried
12 to put the filter that's on the Merit family on a Marlboro
13 cigarette?

14 A. I don't know that they have or they haven't.

15 Q. And you wouldn't know whether or not that would --

16 A. But let me tell you, though, I suspect in the
17 development of the Merit -- excuse me, the Marlboro Ultra
18 Light, every filter we had in our arsenal was tried. So I
19 suspect, although I don't know, that that was definitely
20 tried on the Marlboro Ultra Lights.

21 Q. Did you ever see any documents, reports, memoranda
22 that support what you believe might have happened?

23 A. Not specifically. I can't recall.

24 Q. Do you recall vaguely seeing --

25 A. No.

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1 Q. -- anything --

2 A. No.

3 Q. -- testing any of these other filters on a
4 Marlboro cigarette?

5 A. I don't recall all the filters that were put on
6 the Marlboro cigarette to produce the Marlboro Ultra Light
7 cigarette. I don't recall what all the ones were that
were

8 on there.

9 Q. Do you recall there being any kind of testing of
10 other types of filters other than what is presently sold
on

11 the Marlboro Ultra Lights cigarette?

12 A. No, I don't.

13 Q. Do you believe that such documentation exists?

14 A. If we did the work, documentation exists.

15 Q. But you don't know whether the work was done or
16 not?

17 A. I'm trying to recall specifically. I can't recall
18 specifically.

19 Q. Okay. And to say that the work was done would be
20 speculation on your part?

21 A. Yes. Yes.

22 Q. And you don't want to speculate, because that's
23 not what your job is. Right?

24 A. That's correct.

25 Q. Do you still get \$1400 a day?

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203

1 A. For this particular case, yes.

2 Q. And to date, how many hours have you put in on
3 this case?

4 A. I don't know. I don't recall.

5 Q. Can you give me an estimate, please?

6 A. Yes, I'll try. How many days was I here last time
7 for this? Three maybe? Do you remember?

8 MS. MASON: I can't help you. You've got to --

9 THE WITNESS: You can't help me? Sorry about
10 that. Let's suppose I was here three days for the last
11 time. Okay? I came yesterday and today, so that's five
12 days. All right? There was probably two or three days --
13 two days let's say before the deposition last time in
14 preparation, and then I said there's probably a half a day
15 or maybe go ahead and count it a full day after the
16 deposition. So whatever that is. Whatever that totals up
17 to be.

18 MS. CHABER: Q. And any phone conferences or
19 meetings outside the parameters of, you know, before and
20 after?

21 A. Other than setting up these meetings, no.

22 MS. MASON: I think you counted something twice.

23 When you said three days the first time and then two days
24 preparing for deposition, those were all the same days, I
25 think. Weren't they?

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1 THE WITNESS: I said three days here, right? In
2 San Francisco.

3 MS. MASON: Oh, I see. Okay.
4 MS. CHABER: Q. And then there were two days
5 before that?
6 A. Then there were probably two days prior to that.
7 MS. MASON: Okay.
8 THE WITNESS: I'm just guessing. And then there's
9 a day, approximately a half a day, I think, let's call it
a
10 full day, after the deposition. That's about the extent
of
11 it, plus or minus a day or two.
12 MS. CHABER: Q. Have you ever done any -- or are
13 you aware of Philip Morris doing any comparison testing
14 between filter efficiency of filters produced by Philip
15 Morris and any other tobacco company?
16 A. Specifically, no.
17 Q. Did you have dealings with Thomas Ozdine when you
18 were working at Philip Morris?
19 A. When I first came to work at Philip Morris, Tom
20 Ozdine was my director, my indirect boss two -- three
levels
21 above me.
22 Q. And what years would that have been?
23 A. I came to work at Philip Morris in '72, and went
24 to the computer applications division somewhere. And the
25 year I went to computer applications division he was no
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1 longer a boss at the time.
2 Q. Did you have any discussions with Dr. Ozdine at
3 any point in time at Philip Morris with respect to
4 biological testing of cigarettes?
5 A. Not that I can recall.
6 Q. Did you have any conversations with Dr. Ozdine
7 regarding work being done at INBIFO at any time?
8 A. I can't specifically recall the instance, but on
9 numerous occasions I remember Dr. Ozdine talking about
10 INBIFO and work that was going on there. And of course,
11 biological testing -- but the previous answer to the
12 biological testing thing, I wasn't specifically talking
13 about any particular test that was going on with Dr.
Ozdine,
14 but it was generally understood by me and others that when
15 he talked about the biological testing, it was going on at
16 INBIFO.
17 Q. Was there any biological testing to your knowledge
18 going on in Richmond at Philip Morris?
19 A. Yes.
20 Q. What?
21 A. I believe we did salmonella or Ames-type assays,
22 if that's a biological testing. I guess it is.
23 We were doing other types of work that I was to
24 some extent aware of, not involved in.
25 Q. Like what?
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1 A. When Dr. DeNoble was there, the work that he was
2 doing was -- I was aware of it, what -- in general terms
at
3 least what he was doing.
4 Q. Anything else?
5 A. A lot of the same analytical techniques that we
6 talked about before that I looked at at INBIFO, gas

7 chromatography, mass spectro, that type of thing, was also
8 technologies that was in Richmond at that time. So if
9 that's biological testing, I guess it's analytical type
10 testing, I think some of the same capabilities -- I know
11 some of the same capabilities were in Richmond as well as
12 INBIFO.

13 Q. Same capabilities, but was some of the work being
14 done?

15 A. Yeah, some of the work. For example, some of the
16 nitrosamine work was being done there. As I said before,
17 this Ames assay work was being done. And other -- other
18 types of assay techniques were under investigation and
being

19 developed in Richmond.

20 Q. Are you aware of any animal testing other than
21 Dr. DeNoble's work that was going on at Philip Morris in
the
22 United States?

23 A. Not that I'm aware of, no. I don't know whether
24 there was or there wasn't. I don't know.

25 Q. You didn't know one way or the other whether there

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1 was or wasn't?

2 A. I couldn't tell -- I didn't know that there was,
3 but I couldn't say for a fact that there was.

4 Q. You did know that there was --

5 A. I did not know that there was.

6 Q. Okay.

7 A. I can't say that there wasn't.

8 Q. You don't know one way or the other?

9 A. That's right.

10 Q. Okay. Thanks. And what did you understand
11 Dr. DeNoble's work to be?

12 A. He was -- my understanding was I guess a
13 psychologist or whatever, looking at the addictive nature,
14 if you will, or non-addictive nature of nicotine. That's
my

15 understanding.

16 Q. And were you told what any conclusions of his work
17 were?

18 A. I remember him making a presentation in the A-1
19 conference room that we talked about earlier. And the
20 conclusions that I remember him talking about was that it
21 wasn't.

22 Q. Do you recall him discussing acid aldehyde?

23 A. I don't recall that discussion. No, I don't.

24 Q. Do you recall any discussions regarding nicotine
25 in combination with any other substance being addictive?

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1 A. I don't recall that discussion. No, I don't.

2 Q. It wasn't an area --

3 A. No.

4 Q. -- you were focused on?

5 A. No, it was not. It was a general presentation
6 that I heard him make.

7 Q. As you sit here today, do you believe that
8 cigarette smoking causes cancer?

9 A. You know, I'm not going to argue with people who
10 say it does. I don't -- I can't make that argument to say
11 it doesn't.

12 From a personal basis, I think I told you before,

13 I will not ever advise anybody to smoke. As a matter of
14 fact, I advise people not to smoke. I've told my kids not
15 to smoke. I certainly will do everything within my power
to
16 keep my grandchildren from smoking.

17 But on the other hand, as a scientist, I have not
18 put together a study to allow me to make a scientific
19 decision on that. But I certainly treat it as though it
20 causes these things.

21 Q. So you, Dr. Jerry Whidby, as you sit here today in
22 February of the year 2000 are not willing to make a
23 statement that cigarette smoking causes lung cancer in
your

24 scientific opinion?

25 A. I will not argue with that statement that it

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1 causes cancer.

2 Q. I'm not asking you if you'll argue with it. I'm
3 asking you if you agree cigarette smoking causes lung
4 cancer.

5 A. As a personal opinion, I told you as a scientist I
6 have not put together the information to make that kind of
a

7 statement.

8 However, on the other hand, as an individual,
9 as --

10 Q. I'm not asking you as an individual. And you've
11 given me your --

12 A. Um-hmm.

13 Q. -- your individual. I'm asking you, you are a
14 26-year or were a 26-year employee of Philip Morris, you
are
15 offered as an expert in this case with respect to
cigarettes

16 and cigarette design. I am asking you, Dr. Jerry Whidby,
as

17 a scientist if you agree with the statement that cigarette
18 smoking causes cancer.

19 A. And the answer I told you before is still the same
20 answer that I have now. I will not disagree with that
21 statement but I have no basis to say that it does.

22 Q. So in your opinion, sir, as a scientist, you do
23 not believe that it has been proven that cigarette smoking
24 causes cancer?

25 A. I didn't say that.

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1 MS. MASON: I object. It's a misstatement. He
2 just told you he didn't disagree with that.

3 MS. CHABER: Q. Yes or no, Dr. Whidby. Does
4 cigarette smoking cause lung cancer?

5 A. I'm not -- I can't give you a yes or no on that.

6 I told you I think as an individual and as -- as the way I
7 operate, the answer is that it's treated as it does.

8 Q. That's not my question, on how you're treating
9 it. I'm asking you on a yes or no basis, and I believe
you

10 told me you cannot say yes or no whether it does or
doesn't?

11 A. I'm not an expert in that area. I've told you I'm
12 not. I don't have -- I haven't put together the
information

13 to make that kind of a statement.

14 Q. And do you --

15 A. Operatively, it does. I can't -- that's what I
16 told you. I treat it like it does.

17 Q. And do you, Dr. Jerry Whidby, believe as a
18 scientist that cigarette smoking causes emphysema?
19 A. Same answer to that. I don't -- you know, I treat
20 it like yes, it would. I'm not going to argue with that
21 statement. I'm not going to argue with anybody who says
it
22 does.

23 Q. But you as a scientist have not formed the opinion
24 that that is something that has been proven?

25 MS. MASON: He says he hasn't studied it. There's
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1 a difference.

2 THE WITNESS: I haven't studied it.

3 MS. CHABER: Q. And in 26 years at Philip Morris,
4 did you ever have any discussions with other scientists as
5 to whether or not that was a true statement, that
cigarette

6 smoking causes cancer?

7 A. I didn't sit down with any scientist at Philip
8 Morris and discuss cause of cancer. I mean that's not my
9 area. I haven't put it together. I haven't done that.

10 But when the health community and everybody else
11 in the world is saying it does, I treat it like it does.

12 Q. And at what point in time did you start treating
13 it as a scientist at Philip Morris like cigarette smoking
14 caused lung cancer?

15 A. Well, I'll tell you, when I was starting smoking
16 back in the '60s probably, I knew for a fact at that time
17 that it was not good for you. Everybody around me told me
18 it was not good for me. My parents told me it was not
good

19 for me. They told me not to do that. They told me -- it
20 was called cancer sticks. It was called coffin nails, all
21 those things. I still started and I still smoked for a
22 period of time. So I knew then. Popular opinion was that
23 it caused cancer, it caused these things. And it took me

a
24 while to start treating it as such as an individual. But
I

25 always knew it was risky. I always knew there was a
problem

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1 with it.

2 Q. Sir, to this day, is it fair to say that you as a
3 scientist do not believe that the case has been proven
that

4 cigarette smoking causes cancer?

5 MS. MASON: Object. Misstates his testimony.

6 MS. CHABER: Q. You can still answer. An
7 objection doesn't mean that you don't get to answer.

8 MS. MASON: You can answer. You've answered it
9 three or four times already.

10 THE WITNESS: Yeah, I think all I can do is repeat
11 what I've said.

12 I haven't studied it. I haven't set that out. I
13 could. I could do that. I can go learn enough from the
14 literature that I'd come back and I can make a statement

to

15 you. And I can do that about a number of scientific
things,

16 and I can do that about a number of scientific things that
I

17 have studied. But this one is one I haven't.

18 But I'll tell you, I think when I come back my
19 conclusion would be the same as the rest of the scientists
20 who really have studied this. And I think my conclusion
21 probably would be yes, it does. But I have not done that.

22 I can't do that without -- I can't -- I can't violate my
23 scientific principles. But I tell you, if I went out
there

24 and did it, some other people have done it and they make
the
25 statement it does, I'll come back and tell you it does.

But

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1 I haven't done that.

2 MS. CHABER: Q. Was it generally accepted at
3 Philip Morris in the research department that cigarette
4 smoking causes lung cancer?

5 A. I think so at the level that I talked to you about
6 for my own study. But the people who studied it, I don't
7 know what they -- what they concluded. I think most of
them

8 have concluded that it does, but I don't know that.

9 Q. When you started at Philip Morris in, what, 19 --

10 A. '72.

11 Q. -- '72, who was involved at Philip Morris in the
12 research department with studying the issue of whether
13 cigarette smoking causes lung cancer?

14 A. There was a group, a biological research group who
15 I assume that was their issue.

16 Q. And who were the people?

17 A. Well, it was headed by Tom Ozdine. And there were
18 other people in the group, but I don't remember. It's a
19 fairly good-sized group.

20 Q. And you never had any discussions with any of
21 those people about whether or not it was accepted within
22 that group that cigarette smoking causes lung cancer?

23 A. No.

24 Q. Never once?

25 A. Not that I recall.

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1 Q. In the 26 years that you were at Philip Morris,
2 did you ever have any discussions with anyone whose
business

3 it was to know the answer to that question as to whether
or

4 not it was accepted within Philip Morris that cigarette
5 smoking causes lung cancer?

6 A. Well, as I've answered before, I think -- I think
7 the general belief amongst the scientists at Philip Morris
8 that smoking was a risk factor, and it's a risky thing to
9 do. If you're going to do it, you know, whether it causes
10 these diseases, lung cancer and emphysema as you suggested
11 before, I think we made our own personal decisions about
12 that.

13 Q. That's not what I'm asking you. I'm asking you as

14 scientists, as people working in the field and charged
with
15 the knowledge of what diseases cigarette smoking causes at
16 Philip Morris, was it the general consensus at Philip
Morris

17 that cigarette smoking causes lung cancer at any point in
18 the 26 years that you were there?

19 A. I don't know whether it was a general consensus or
20 not. I didn't take a poll of people. I didn't go around
21 asking them what were the -- if this person believes or

that

22 person believed it.

23 (Brief interruption in proceedings.)

24 MS. CHABER: Could you read back my last question?

25 (Testimony read as follows:

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1 Q. That's not what I'm asking you. I'm
2 asking you as scientists, as people working in the
3 field and charged with the knowledge of what
4 diseases cigarette smoking causes at Philip
5 Morris, was it the general consensus at Philip
6 Morris that cigarette smoking causes lung cancer
7 at any point in the 26 years that you were there?

8 A. I don't know whether it was a general
9 consensus or....)

10 MS. CHABER: That's fine. I don't need the
11 answer.

12 MS. MASON: I think he was in the middle of his
13 answer, though. Were you in the middle?

14 MS. CHABER: I think he finished.

15 THE WITNESS: Let's see what the answer was. If
16 you don't mind.

17 MS. CHABER: Fine. I don't care. I wanted to
18 hear my question back, but I thought you had finished.

But

19 if you haven't, that's fine.

20 (Testimony read as follows:

21 A. I don't know whether it was a general
22 consensus or not. I didn't take a poll of people.
23 I didn't go around asking them what were the -- if
24 this person believes or that person believed it.)

25 THE WITNESS: That's a fact. I didn't.

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1 MS. CHABER: Q. Did you, Dr. Jerry Whidby, have
2 any conversation with any person charged with the
3 information, it being their job to know what disease or
4 diseases cigarette smoking caused, have any discussion

with

5 them as to whether or not cigarette smoking was accepted
by

6 that person as causing lung cancer?

7 A. I can't recall asking that question.

8 Q. Of anyone in 26 years?

9 A. (Witness shakes head.)

10 Q. You're shaking your head, but that's not going to
11 show up on the transcript.

12 A. I can't recall asking that question.

13 Q. And would the same be true with respect to --

14 A. Most of the time -- the questions that I was --
15 the things that I was involved in on a scientific basis

was

16 how to remove these things. What do we do to modify the
17 cigarette, to get it lower in constituents that we were
18 interested in. And how do we work on the process to make
19 expanded tobacco that we can add to a cigarette to reduce
20 tar. How do we work on a paper to get more permeability
on
21 the paper to reduce tar and nicotine? That will reduce
the
22 exposure from the whole cigarette, and hopefully it will
23 build something that is consumer acceptable. Because
24 something you sell that is not consumer acceptable or put
25 out on the market that is not consumer acceptable won't
sell

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1 and won't do any good.

2 Q. The question is towards what end?

3 A. My belief is that if we reduce the tar and the
4 nicotine -- the tar, the nicotine follows in a cigarette,
5 you reduce the exposure.

6 Q. And by reducing the exposure, would you prevent
7 any cancers?

8 A. You perhaps would reduce the incidence of the
9 diseases that are said to be caused by cigarette smoking.

10 Cancer, emphysema, the others.

11 Q. But you don't know whether any scientist at Philip
12 Morris actually believed that any of those diseases,
cancer,

13 emphysema, were caused by cigarettes? Do you?

14 MS. MASON: That's not what he said, either. He
15 said he's not had that conversation, but he believes that
16 several people did. It misstates his testimony.

17 THE WITNESS: I believe that people did, whatever.

18 MS. CHABER: Q. Who do you believe believed that
19 cigarette smoking caused lung cancer?

20 A. Specifically, I don't know. I think the people
21 who -- who studied that area, who were responsible for
that
22 area. And how can a group of scientists on the outside,
the
23 national health groups, in the plural, no one in
particular,
24 come to the conclusion that cigarettes causes cancer and
25 emphysema and the other things that we put on our
packages,

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1 we put them out in the marketplace, and our scientists who
2 are good scientists come to a different conclusion? I
don't

3 know see how they could do that, so they must have come to
4 that conclusion.

5 Q. So you're assuming that the scientists within
6 Philip Morris agreed with the public health community that
7 cigarette smoking caused lung cancer during the entire 26
8 years that you were at Philip Morris?

9 A. I didn't say that. I think -- I think at some
10 point in time they saw enough of the evidence and they
11 were -- they were developing the data themselves, too,
they
12 probably came to the same conclusions the public health
13 community came to. I don't know when that was.

14 Q. You don't know?
15 A. No, I don't.
16 Q. Was it within five years of your coming there?
17 A. I don't know. I don't know.
18 Q. 1980s?
19 A. I don't know.
20 Q. 1990s?
21 A. I don't know that, either. Now, I really -- I
22 just don't know when that -- when individuals came to
those
23 conclusions. I think it probably was an individual thing.
24 (Brief interruption in proceedings.)
25 THE WITNESS: But nobody -- I didn't go around and
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1 poll people about it, as I said before. And nobody came
to
2 me. There's no reason they would have come to me and said
3 "Hey, as of this date I believe cigarettes cause this" and
4 another person come down and say "I believe it causes
5 this." They didn't do that.
6 MS. CHABER: Q. What about the research
7 department as a whole? Do you know whether or not it was
8 the opinion of the research department that cigarette
9 smoking causes lung cancer?
10 MS. MASON: I think that calls for speculation,
11 given his answer.
12 THE WITNESS: It really does. And --
13 MS. CHABER: Q. How about Dr. Ozdine?
14 A. Um-hmm.
15 Q. Did Dr. Ozdine believe that cigarette smoking
16 caused lung cancer as a scientist?
17 A. I don't know. I didn't ask him.
18 Q. Did you ever ask anybody why you were removing any
19 particular constituents?
20 A. No. I was familiar enough with the literature. I
21 didn't really ask that question. I was familiar enough
with
22 the literature to know that these compounds in a high
enough
23 dosage are toxic.
24 Q. What compounds?
25 A. Phenols. Benzo(a)pyrene.
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1 Q. What dosage?
2 A. I don't recall. Most of the dosages that I did
3 read about were substantially above the levels that were
in
4 the cigarettes.
5 Q. Then why lower them?
6 A. Because over time the literature was saying you
7 should lower them.
8 Q. So it was merely because somebody else was asking
9 to have it done, not because any of the scientists at
Philip
10 Morris thought it should be done?
11 A. Oh, the scientists at Philip Morris thought it
12 should be done.
13 Q. Why?
14 A. Because they thought the compounds were not -- not
15 compounds that ought to be in smoke.
16 Q. Why not, if they don't cause disease?

17 A. Because -- because of the --
18 MS. MASON: He didn't say that. I object as
19 misstating his testimony.
20 MS. CHABER: Q. Why, if the dosages were not high
21 enough to be toxic?
22 A. I assume that they were looking at the overall
23 exposure and trying to reduce the overall exposure.
24 I mean you talked about looking in the Merck
25 Index, the LD 50 for some of the constituents in the Merck
220
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1 Index would take lots and lots and lots of cigarettes to
get
2 to the LD 50 of some of those things. So I had to trust
3 them to say that they were saying for us to remove the
right
4 list of things. But in general, what we tried to do is,
as
5 I said before, is to reduce tar. And tar would reduce all
6 those things.
7 MS. CHABER: Let's take a couple-minute break.
8 (Brief recess in proceedings - 4:28 to 4:39 pm.)
9 MS. CHABER: Back on the record. And I know you
10 need to leave soon.
11 Q. Is it possible to make a nitrosamine-free
12 cigarette?
13 A. I don't know the answer to that fully, but I
14 believe it's possible to substantially reduce nitrosamine
15 content in a cigarette. I think we've done that in the
16 Accord product, and there's work underway now to reduce
17 the -- substantially reduce the amount of nitrosamines in
18 cigarettes.
19 Q. Can you remove tobacco-specific nitrosamines from
20 tobacco?
21 A. Again, I think you can reduce it. Whether you can
22 get down to zero or not, that's -- it may not be possible,
23 but the reduction is certainly possible.
24 Q. And how would you do that?
25 A. Well, one of the ways that is being done now, the
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1 four major tobacco companies -- Philip Morris, Reynolds
and
2 Lorillard and Brown & Williamson -- have gotten together
and
3 are working with the flue-cured farmers to modify their
4 barns so the flue gases won't go directly into the
tobacco.
5 It was discovered at Reynolds it would substantially
reduce
6 the amount of nitrosamines in the flue-cured tobacco.
7 Philip Morris is also trying to make contact with
8 some burley farmers so that we can better understand how
to
9 control the nitrosamines in the burley tobacco and reduce
10 the nitrosamines in burley tobacco.
11 Q. Do you know when it was first discovered that
12 flue-cured tobaccos were higher in nitrosamines?
13 A. I don't know that it is higher in nitrosamines.
14 Q. Higher in nitrate?
15 A. Flue-cured tobacco does not have much nitrate at
16 all in it.
17 Q. What is it that changing the curing methods will

18 do?

19 A. What was found, and I think it was found either
20 last year or the year before at R.J. Reynolds Tobacco
21 Company, that if you cure tobacco in the current way which
22 is the current way of curing flue-cured tobacco is to heat
23 it with propane, that heats it up, brings it to a
24 temperature and it starts its maturation or senescence
25 process. The leaves go from green to yellow then to
brown.

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I 1 The gases from the propane interact with the tobacco, and
2 don't know the details of that, and form nitrosamines in
the 3 tobacco.

4 However, if you don't let the gases contact the
5 tobacco and go through a heat exchanger, that will cause
the 6 tobacco not to have the nitrosamines in it. That's the
work 7 that's being done now with the farmers so that this year
8 hopefully most all the flue-cured tobacco won't have
9 nitrosamines in it.

10 The burley tobacco on the other hand, does have
11 nitrate in it. That's just the nature of the burley
12 tobacco.

13 But there's some work that we believe can be done
14 to minimize the amount of nitrate that's present in the
15 burley tobacco, thereby reducing the nitrosamines that's
in 16 that style of tobacco.

17 Q. And do you know when it was first discovered that
18 heating the tobacco --

19 A. I don't know when Reynolds discovered that.

20 Q. Do you know whether or not that was known within
21 Philip Morris before Reynolds purportedly discovered that
22 last year?

23 A. I don't think it was known. Not in that detail,
24 no. If it was, we would have done something about it.
25 That's my belief. I assume we would have done something

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1 about it.

2 Q. But you don't know whether it was known --

3 A. No, I don't.

4 Q. And you don't know whether or not that was looked
5 at?

6 A. I can't say that it was known. I can't say it
7 wasn't known. But not to my knowledge was it known.

8 Q. Do you know which cigarettes that you were working
9 on testing for the Massachusetts project that contained
10 heavy metals?

11 A. All the cigarettes we looked at contained, as best
12 we could determine, a proportional amount of the heavy
13 metals.

14 Q. What do you mean, a proportion?

15 A. In proportion to the tar level of that cigarette.

16 In other words, if you ranked the heavy metals from the
17 lowest delivery cigarette to the highest delivery
cigarette,

18 the heavy metals would scale according to that ranking.

19 Q. And they all had it?

20 A. Pretty much so, yes.
21 Q. And what heavy metals are we talking about?
22 A. The ones that are commonly found in the soils.
23 Q. And what are those?
24 A. I don't remember what all we tested for. I
25 remember some of the things we tested for are cadmium. I

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1 believe we tested arsenic, mercury. Things that are
present

2 in very, very low levels in soils and then they get on
3 tobacco.

4 Q. Do you know whether all the cigarettes had
5 arsenic?

6 A. At the detection level we had, I don't know
7 whether we detected arsenic in all of them or not, but
8 again, there were -- they were according to the
9 concentration of tar that was found in the cigarettes,
they

10 scaled according to that, too.

11 Q. Do you know whether any Philip Morris cigarettes
12 had arsenic?

13 A. Again, most likely, if any of them had arsenic in
14 it that was above the detection level, then Philip Morris'
15 cigarettes would have arsenic in them.

16 Q. I didn't follow the answer.

17 A. Okay. If we could detect arsenic in the
18 cigarettes at the highest level, and one of the Philip
19 Morris' brands was a non-filtered cigarettes, so if we
20 detected arsenic in that, then there would be arsenic in
21 Philip Morris' cigarette.

22 Q. In all of them?

23 A. Well, I couldn't say that it wouldn't be in all of
24 them because it's in the tobacco.

25 Q. Okay.

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1 A. And all natural products are going to have those
2 heavy metals in them. Spinach. Lettuce. So if you do an
3 analytical determination on those, you would find
4 approximately the same amount of those metals.

5 Q. Do you know whether -- strike that.

6 Were any radioactive materials found in any of the
7 cigarettes?

8 A. We didn't evaluate them for radioactivity.

9 Q. Did you do any testing while you were at Philip
10 Morris on fertilizers and residue remaining on fertilizers
11 in cigarettes?

12 A. Yes. Nitrate is a fertilizer. And some of that
13 remains -- or at least burley tobacco would have nitrate
in
14 it. So maybe it was from the fertilizer, maybe the burley
15 tobacco made it, but it had fertilizer constituent in it.

16 Though it also had potassium in it, which is part of a
17 fertilizer.

18 Q. And which --

19 A. It would also have --

20 Q. Sorry.

21 A. -- some nitrogen-containing compounds in it, and
22 nitrogen is part of the fertilizer. Taking that nitrogen,
23 phosphorus and potassium are generally the components of a
24 fertilizer -- 10-10-10 fertilizer is 10 percent nitrogen,

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25 percent phosphate, 10 percent potassium -- so all those
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1 constituents are in all plant materials.

2 Q. All plant materials that are fertilized?

3 A. Even the ones that aren't.

4 Q. Oh. But the fertilizer may -- applying fertilizer
5 may affect the levels of what would be in natural --

6 A. It could. But all plants need those basic --
7 those fundamental materials to grow. They won't grow
8 without it.

9 Q. Right. And when they have the correct amount of
10 them, they use them up in the growing process, correct?

And

11 don't leave additional residues?

12 A. No, I can't say that. See, potassium, which is a
13 part of the fertilizer, all right? It stays there. It's

an

14 salt. It's part -- you have potassium in you, I have it
in

15 me. All plants have it in them.

16 Q. We aren't talking about potassium, are we?

17 A. It's part of the fertilizer.

18 Q. But we're talking about the other two parts.

19 A. Phosphate.

20 Q. And the nitrogen?

21 A. And that stays there, too. The plant over there
22 has nitrogen in it (indicating). All plants have to have
23 nitrogen in them, otherwise it won't -- it can't exist.

24 It's part of the protein.

25 Q. What brands of Philip Morris cigarettes use burley

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1 tobacco?

2 A. All of them, to my knowledge.

3 Q. All right. You've got to get going. I guess
4 I'll see you -- do you know, have you been told what day
5 you're testifying yet?

6 A. I'm hoping for Tuesday.

7 Q. This Tuesday?

8 A. (Witness nods head.) I haven't been told. How
9 about tomorrow?

10 Q. I would be sort of surprised if that happens,
11 given Dr. Townsend.

12 MS. MASON: Right. Dr. Whidby is going on right
13 after Dr. Townsend.

14 MS. CHABER: Okay.

15 MS. MASON: And it just all depends. It could be
16 Tuesday, if we have to start on Monday. I don't know. I
17 walked out of the phone call. I don't know how it ended,
18 but I don't know whether Townsend is going on on Monday.

I

19 haven't talked to him, so --

20 MS. CHABER: Okay. Thank you.

21 (Whereupon the taking of the Witness' testimony
22 was concluded at 4:50 p.m.)

23 ---oo---

24 _____

25 DATE SIGNATURE of the WITNESS

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Jerry Whidby Deposition Continued